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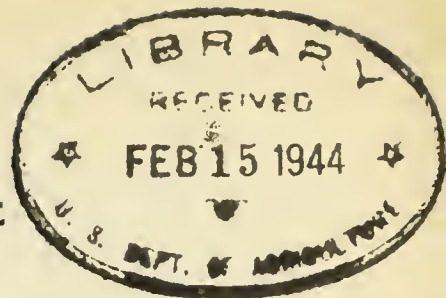
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UNITED STATES DEPARTMENT OF AGRICULTURE

Bureau of Agricultural Economics

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Agricultural Economics Bibliography No. 30



LARGE SCALE
AND
CORPORATION FARMING

A Selected List of References.

Compiled by Margaret T. Olcott,
Under the Direction of Mary G. Lacy, Librarian
Bureau of Agricultural Economics

Washington, D. C.
November, 1929



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PREFACE

Large scale and corporation farming have been popular subjects for discussion during the last few years. In addition to this popular discussion there have been published a number of articles of a more scientific nature, such as the papers presented at the Power and Machinery Division of the American Society of Agricultural Engineers in December, 1928. These papers are based largely on research studies which have been made either on this or related subjects. This bibliography includes references to both types of articles as well as to the research studies upon which the papers were based.

In many cases the terms large scale and corporation farming are used interchangeably. The terms factory farms, industrialized farms, and chain farms are also used rather loosely. This bibliography includes references on large scale farms, or farms of unusual size for the particular type of farming in question. Some of these farms are owned by individuals, some by partners, and others by corporations. References on group farming, and chain farming, are also included. These farms are usually a number of farms operated either by tenants or by hired labor under the supervision of a centralized management or an agricultural service. The term, chain farming, is usually applied to group farming where all the farms in the group are owned by the same individual, partnership, or corporation. All of the farms in a chain need not be in the same locality or state. It has been difficult to draw a definite line between these subjects and the related subjects such as agricultural machinery, tenancy and agricultural colonization. Therefore, in order to keep the bibliography within reasonable bounds, its scope has been limited by omitting the following subjects which are somewhat related except when the discussion includes definite reference to the size of the enterprise: agricultural machinery and the mechanization of agriculture; tenancy; and agricultural colonization, with the exception of the J. C. Penney-Gwinn Corporation farms in Florida and the MacRae Colonies in North Carolina, since both of these groups are often referred to as "chain farms".

Some references on collective farming, especially in Italy and Russia, have been included as these groups have some form of centralized management. References on cooperative ownership of machinery and cooperative credit societies have not been included.

A few references of historical interest have been included but this field has not been covered exhaustively. Some references to plantations have been included, but references to plantations operated by slave labor have been omitted. For information on the large farm enterprises of the early days of this country, economic histories should be examined and also histories of the cattle trade and the Southern and Northwestern states. A comprehensive bibliography entitled: A Bibliography of the History of Agriculture in the United States, which

will be a source for references to the literature in this field, is now being prepared by E. E. Edwards of this Bureau.

It has not been possible to cover thoroughly the publications issued in foreign countries but such items as were readily available have been included. For additional foreign references, the Bibliographie der Sozialwissenschaften published by the Statistisches Reichsamt of Germany should be examined. A typewritten list of references on the replacement of labor by machinery with the title: Farm Machinery and Farm Labor in the United States has been prepared in this Library. It may be borrowed for copying.

The bibliography is arranged by country. The references under the United States are subdivided into the following groups: History; General; North Central States; Southern States; Individual States; Editorials and Unsigned Articles. The references under the other countries are not subdivided.

There is an author and subject index on pages 73-85. The numbers following many of the entries are the call numbers used in the United States Department of Agriculture Library. The abbreviation Pam. Coll. indicates the location of the publication, either in the United States Department of Agriculture Library or the Bureau of Agricultural Economics Library. The initials L. C. indicate that the publication was consulted in the Library of Congress.

Acknowledgement is made of the assistance of Dr. G. A. Studensky of the Samara Agricultural Institut at Moscow, and of Mr. L. Volin of this Bureau who assisted in the selection of the Russian titles included in this list. Acknowledgement is also made of the assistance given by Mr. D. C. Mumford of this Bureau in defining the scope of the bibliography.

Mary G. Lacy, Librarian,
Bureau of Agricultural Economics,
U. S. Department of Agriculture.

November, 1929.

Sources Consulted

Card catalogues in the following libraries:

U.S.Dept. of Agriculture Library.

U. S. Bureau of Agricultural Economics Library.

Agricultural Index, 1916 to October 1929.

Experiment Station Record, v. 1, 1889 to v. 61, no.3, August 1929.

Public Affairs Information Service. Bulletin, 1915 to Nov. 2, 1929.

Industrial Arts Index, 1913 to October, 1929.

Journal of Land and Public Utility Economics, v.1 to v.5, no.3, August, 1929.

Social Science Abstracts, v.1, no. 1, March 1929 to v.1, no. 9, October, 1929.

American Society of Agricultural Engineers. Transactions v.1, 1907 to
v.12, 1918; v.15, 1921 to v.21, 1927.

Journal of Farm Economics, v.1 1919 to v.11, no.4, October, 1929.

LARGE SCALE AND CORPORATION FARMING.

A Selected List of References.

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Bureau of Agricultural Economics.

UNITED STATES

HISTORICAL

1. Benton, Alva H. Large land holdings in North Dakota. (In Journal of Land and Public Utility Economics, v. 1, no. 4, Oct. 1925, p. 405-413)
After tracing the history of large-scale farming in North Dakota, the author states that "The large land holdings of the bonanza type which existed at one time in eastern North Dakota have ceased to be a factor of any importance."
For the historical material the author drew largely from John Lee Coulter's Industrial History of the Red River Valley of the North. See item 4 below.
A brief comment on this article is given under the heading Passing of the Big Farm in the Literary Digest v. 87, Dec. 12, 1925, p. 89-90.
2. Brewer, Wm. H. Report on the cereal production of the United States. (In U. S. Census Office. Report... 10th census, 1880. v. 3, Statistics of Agriculture, p. 371-553.)
In the detailed statement of cereal production the Dalrymple Farms of the Red River Region and large scale wheat farms in Oregon, Washington and California are described, p. 454-459.
In the section entitled Facts and Conditions Pertaining to Cereal Production, p. 522-529, the following points are discussed: The advantages of large vs. small scale farming; contrast of agriculture with manufacturers; joint-stock farming; and, effect of implements and machinery on agriculture.
3. Burton, Harley True. A history of the J. A. Ranch. (In Southwestern Historical Quarterly, v. 31, no. 2, Oct. 1927, p. 89-115; no. 3, Jan. 1928; p. 221-260; v. 32, no. 1, July 1928.
Not examined.
4. Coulter, John Lee. Industrial history of the Valley of the Red River of the North. Bismarck, N. D., Tribune, State printers and binders, 1910, p. 529-672. (Collections of the state historical society of North Dakota, v. 3) 281 C83.

Bibliography; p. 667-672. Bonanza farms and the one crop system of agriculture: p. 569-596. Cost of producing wheat in the Red River Valley, large vs. small farms: p. 597-611.

This describes in some detail the system of management of the Mayville, Grandin, Cass and Cheney wheat farms in North Dakota by Mr. Oliver Dalrymple and his own Alton farm. Other large farms are mentioned. In drawing his conclusions from this study of the bonanza farms of fifty years ago the author writes:

"During the early period - for the first decade of bonanza farming - the bonanza farms proved to be far more profitable than small scale farming for several reasons. The small farmers had endured a seige of five years of grasshopper ravages and recuperated slowly; they did not have capital with which to equip farms economically; they could not secure economical units of area or operate small units as economically. They did not secure rebates on grain shipped or goods - lumber, equipment, etc., - brought in or wholesale rates on goods purchased. The large farmers had means to equip their farms fully and to economically utilize their land and equipment to the utmost, and were few and exceptional men. All producers started out in 1877 with equipment at a high stage of perfection, price of wheat was high on account of the failure of cereal crops abroad, land cheap, and well adapted to cereal cultivation and at the opening of a period of excellent crops. But not all bonanza farmers made large profits, although they were in a better position to take advantage of the opportunities which presented themselves. And not all the small farmers were unable to make progress. The bonanza farmers made profits from the first - some very large profits - but advanced but little; the small farmers made steady progress and gradually were able to utilize land and equipment as economically, or nearly so, as the bonanza farmers. They are now able - since the only salvation of the farmer is to diversify - as a rule, to net greater profits largely on account of the ability of the family to care for details. The temporary ascendance of the bonanza farms - not understood at the time - made many eminent economists to conclude that "the big fish were eating up the little fish," and that large scale production in agriculture would bring it to a par with other industries in the movement toward concentration. With a more careful study it is now clear that their ascendance was temporary. The medium sized farm, a good economic unit, properly equipped, and well managed, would be the most successful as a basis for production if not as the basis of a nation of agricultural homes." p. 662.

For references to the history of bonanza farming the bibliography and the bibliographical footnotes in this history should be examined.

5. Smith, Rollin E. Wheat fields and markets of the world. Saint Louis, The Modern Miller co., 1908. 418 p.

Chapter 25 on wheat growing in the West contains a brief description of the development of the Dalrymple Farms:

6. U. S. Census Office. Report on the productions of agriculture as returned at the 10th census, June 1, 1880. Washington, Govt. print. off., 1883. (10th census, 1880, v. 3)

This volume contains historical chapters on The Cereals and on Cattle, Sheep and Swine, which include the following references to large scale operations: Dalrymple wheat farms, p. 454-455; Callahan sheep ranch in southern Texas, p. 980-982; Santa Margarita sheep ranch in San Diego County, California, p. 1030; Tejon sheep ranch of General E. J. Beale, p. 78-79; and other minor references in the two chapters.

7. Wells, David A. Recent economic changes and their effect on the production and distribution of wealth and the well-being of society. New York, D. Appleton and Company, 1895. 493 p.

Writing in 1889, the author states that the best authorities both in the United States and Europe are coming to believe that "the only possible future for agriculture ... is to be found in large farms, worked with ample capital, especially in the form of machinery, and with labor organized somewhat after the factory system." He further states that only the future can reveal to what extent land will be cultivated in large tracts, but that something must be done to correct the present "shiftless, wasteful methods of agriculture."

GENERAL

UNITED STATES.

8. American society of agricultural engineers. Power and machinery division. Large-scale farming problems discussed. (In Agricultural Engineering, v. 10, no. 1, January, 1929, p. 31-34)

At the meeting in Chicago, December 4 and 5, 1928, the following took part in the discussion on large-scale farming: Wheeler McMillen; J. Brownlee Davidson; F. E. Fuller, Proprietor, Fuller Agricultural Service; John S. Bird, President, Wheat Farming Company; Carl Williams; J. G. Ohsol; J. Ward Nelson, Farm Manager, Midwest Canning Corporation; D. Howard Doane, President, Doane Agricultural Service; and M. L. Wilson.

Prior to the discussion papers were read by M. L. Wilson, E. G. Nourse, T. D. Campbell, D. H. Doane, and J. W. Nelson. (See entry under author's name for full citation.)

News notes and comment on this meeting appeared in many of the farm papers including: Commercial West, v. 55, no. 2, Jan. 12, 1929, p. 7; Maryland Farmer, v. 13, no. 2, Jan. 15, 1929, p. 3; National Farm News, v. 4, no. 13, Jan. 12, 1929, p. 1; Ohio Farmer, v. 162, no. 24, Dec. 15, 1928, p. 658.

9. App, Frank. Industrialization of agriculture. (In American academy of political and social science. Annals, v. 142, no. 231, March 1929, p. 222-234) 280.9 Im34.

Dr. App writes: "Large scale and corporation farms will increase. Their success will not destroy rural welfare, but instead it will advance farm prosperity. A system of farming that will produce the

greatest amount of quality product per worker will attract capital management and allow a better reward to labor. The family farm will not disappear. Its welfare will be enhanced through the better markets made possible by the large scale farms."

10. App, Frank. Mass production and quality. (In United States Banker, v. 1, no. 6, Sept. 1928, p. 12-13, 33, 35)

After discussing briefly large scale developments in wheat farming, orchards, poultry industry and dairying, Dr. App concludes: "The mechanization of our agricultural operations decreases the labor cost, standardizes and raises quality, allows the fuller application of science, stabilizes the market and makes it a most attractive industry. These developments have been taking place only during the past few years. Unfortunately, we have as yet been able to obtain but fragmentary evidence of this shift in methods. The agricultural industry itself has not yet begun to appreciate their significance. An association of large scale operations encouraging research of the methods used would be highly desirable to place this movement properly in the minds of the public as well as the agricultural world."

11. Black, John D. Agricultural reform in the United States. First edition. New York, London, McGraw-Hill book company, inc., 1929. 511 p. 281B56.

In the chapter on Production Dr. Black discusses factory farms, as represented by the Campbell farms at Hardin, Montana, and Henry Ford's farm at Dearborn, Michigan; chain farming represented by the "plantation system" in the South and dairy farms in Wisconsin; and the larger family farms. In summarizing this discussion, he writes in the conclusion:

"The specific reforms and readjustments needed in agricultural production are larger family-sized farms; more use of power and machinery; more extensive cultivation of the poorer lands, or their conversion to pasture or forest; more intensive cultivation of the better land, in terms of capital goods, not labor; heavier feeding of the best livestock and less feeding of poor livestock; more specialization (less diversification) in the areas of general farming; more livestock in most of the areas now producing one or a few crops; and quicker adjustments to fundamental changes in economic conditions such as competition with other areas at home or abroad. Large-scale factory farming will have very little development; chain farming will have somewhat more development. The family-sized farm will continue to be the principal unit in agricultural production. Public agencies must assist with the foregoing readjustments. The changes needed will nearly always be by regions rather than for the country as a whole. Hence the problems of agricultural production must be analyzed by regions."

12. Brookings, Robert S. Agricultural corporations; the conversion of agriculture into a prosperous industry. Socializing the soulless corporation; a sequel to agricultural corporations. [Washington,

D.C., Printed ... by the press of Judd & Detweiler, inc.,
1928] 19 p. 281 E792A.

Two articles bound together.

The first was published in full in New York Herald-Tribune,
New York World and United States Daily and in part by other news-
papers.

The author writes, "My own opinion is that the best means of
hastening the present slow and harrowing process of agricultural
regeneration is by the formation of agricultural corporations
which will accomplish in organization and management what big
business has accomplished for industry." - p.7. In the second
article he suggests that such a corporation might "function in a
chain of farms ... with the small units operating independently,
but efficiently, under some form of central management."

13. Campbell, Thomas D. The industrial opportunity in agriculture. (In
Magazine of Business, v.54, no.6, Dec. 1928, p. 656-657, 728, 730
732)

Mr. Campbell points out the need for the small farm for certain
types of farming and the need for the large farm "on less pro-
ductive land with greater transportation costs and less investment
per acre."

14. Carr, Lewis F. America challenged; a preface to a point of view.
New York, The Macmillan company, 1929. 322p. 281 C23

According to the Washington Star of April 15, 1929, the author of
this book, which was distributed to members of Congress at the opening
of the special session on farm relief, is a farmer who has spent six
years in visiting forty-seven states investigating the agricultural
situation. After discussing the economic and social aspects of the
agricultural problem the author concludes: "If we commercialize our
farms into rushing, high-pressure organizations, what refuge will
there be in our national make-up for sober living? Will this con-
dition of commercialized farming, which business men say is
inevitable, represent a national gain or a national loss, entirely
aside from the question of pecuniary considerations?"

"The American family farm has stood the test of centuries. It
has been the cradle of much that is best in American life. Shall
we allow it to disintegrate?" ...

15. Chamber of commerce of the United States. Agricultural service department.
Large-scale farming. Washington, D.C. [July 29, 1929] 37p. 281 C35L

This study was undertaken as a start toward the collection of
information on the actual status of large-scale farming in the United
States. The foreword states:

"The Chamber of Commerce of the United States holds no brief for
or against large-scale farming. It merely has sought in this report
to bring together such items of information concerning this type of
farming as could be obtained from income tax reports on incorporated
farms, from direct correspondence with owners and managers of large
farms and from published works on large-scale farming."

The conclusions reached in this study are summarized in part as follows: "Large-scale farming, although proportionately a small part of the agricultural industry of the United States, is an established business of considerable magnitude. The fact is amply demonstrated by statistics from the income tax reports and by the records secured in this survey. Taken as a group, the large-scale farms apparently are no more, and no less, successful than the average of the family farms. Nor is there any uniformity in the success or failure of the large farms. There are fully as wide variations in the efficiency of these farms, as measured by financial returns, as in the efficiency of the small farms."

16. Chamber of commerce of the United States. Agricultural service department. The mechanization of agriculture. Washington, D. C. [August 17, 1929] 17p. 58C35.

"This is a companion report to the report entitled 'Large-Scale Farming', which was issued by this Department of the National Chamber on July 29, 1929. Advances in the mechanization of agricultural production processes are resulting in an enlargement of farms in some areas and, by simplifying the farm labor problem, are facilitating the organization of 'industrialized' farms.

"The substitution of mechanical power for human labor on farms is having other effects than the enlargement of farms. It is causing geographical shifts in farm enterprises, swelling the volume of agricultural production and tending to reduce the prices of farm products. In addition to outlining the mechanical status of agriculture and describing a number of recent developments in agricultural mechanization, the report deals briefly with these changes which are accompanying the increasing use of power on farms."

17. Conference on unemployment. Washington, D.C., 1921. Committee on recent economic changes.

Recent economic changes in the United States. Report of the Committee on recent economic changes of the President's Conference on unemployment. Herbert Hoover, chairman. Including the reports of a special staff of the National Bureau of Economic Research, inc... 1st ed. New York [etc.] McGraw-Hill book company, inc., 1929. 2v. 280 C766.

Chapter 8 Agriculture, by Edwin G. Nourse: v.2, p. 547-602. A review by Wesley C. Mitchell: v. 2, p. 841-910.

"Report of the Committee on recent economic changes of the President's conference on unemployment": p. IX-XXX. Published also by the Dept. of Commerce with title: Recent Economic Changes in the United States. 157. 1 R24.

In the chapter on Agriculture Dr. Nourse writes:

"In certain geographic regions and in various branches of agricultural production, there has been a quiet and very gradual increase in the number of large farming operations. In conformity with general business practice, such undertakings, if they pass the size compatible with individual proprietorship, tend to be organized as commercial corporations. This has aroused in some quarters unreasonable expectations, and in others unwarranted fears, of a rapid spread of corporation farming. It is much too early to attempt to prove conclusively just what this movement may amount to. Likewise, the space limitations of the present volume do not permit any extended analysis of what the author believes to be its possibilities and limitations. It is a matter of common knowledge, however, that corporate farming enterprises have demonstrated their ability to organize farming undertakings of moderately large size with efficiency and economy, and it would hardly be conceivable that agriculture, even with its peculiar needs, could completely escape the consolidation tendency of the age. Obviously, the technique of corporate organization and management must undergo considerable adaptation if it is to spread in the field of agriculture. It would seem imperative also that, for its economic success as well as its social value, great attention must be given at each step of its development to seeing that conditions of domestic living, hours of labor, wages, opportunity for advancement, and conditions of community life be better rather than worse than those obtaining prior to the coming of the agricultural corporation. So much progress has been made along these lines in other fields of corporate endeavor that there would seem no real reason why, with alterations to conform to the somewhat different situation, these lessons should not be effectively put in practice in agriculture.

"Even at its best, however, any trend toward the industrialization of agriculture is regarded in some quarters as a social loss and political danger, because of the decay of that 'sturdy yeomanry' which is held to be the 'last bulwark of true democracy.' It is asserted also that such a transition would bring a larger proportion of our population into living conditions unsatisfactory from the standpoint of health as well as morals. But does not this rather sentimental reaction to the problem tend to idealize the best of country living conditions and to forget its flagrant shortcomings; to emphasize the city's evil repute in the matter of slum and sweatshop, without giving full weight to the achievements and potentialities of modern city efforts for better housing, health, entertainment, and regulation of working conditions?" - p. 592.

18. Creed, C. H., jr. Golden opportunity is right where I sit. Agriculture stands on the brink of a tremendous change. (In Dakota Farmer v. 48, no. 11, June 1, 1928, p. 613, 627)

Agriculture is becoming industrialized and investments in large-scale farming organized on an industrial basis are worth while.

19. Crowther, Samuel. Henry Ford talks about farming (In Country Gentleman, v.89, no.33, Aug. 16, 1924, p.1-2, 18) 6 C833.
In this interview, Mr. Ford states that the general farm "is now little business in a world of big business" and recommends that dairying be cared for by corporations and that the remainder of general farming be done as a part-time job.
20. Crowther, Samuel. The new agriculture (In Country Gentleman, v.92, no.10, Oct. 1927, p. 3-5, 46, 49-50; no.11, Nov. 1927, p. 18-19, 114, 117-120; no.12, Dec. 1927, p. 10-11, 102-103; v. 93, no. 1, Jan. 1928, p.11-12, 129, 131) 6 C833. Reprinted in pamphlet form. 281 C882
In concluding this series of articles, the author writes "The essential point of the new agriculture is a grouping in commodity production so that costs may be decreased. This may be arrived at in any one of several ways and only time can tell which is the best way. We can start with these three facts: First, that, although the price obtained is important, it is the cost of production which determines the profit.
"Second, the statistics for any locality show that many proprietors have not the managerial ability to earn a living under their own direction. They also show that many proprietors have the managerial ability to direct more property than they have.
"Third, that the savings which can be brought about by the use of power and machinery, and arrangements of work depend upon capacity use. This in turn demands larger productive units - larger farms or larger groupings of farms."
21. Dean, William Harper. A \$50,000,000 orchard venture; the American fruit growers, incorporated, begins operations. (In Country Gentleman, v. 84, no. 39, September 27, 1929, p. 6-7, 31) 6 C833
A corporation chartered in Delaware July 7, 1919 with J. S. Crutchfield, president, Charles J. Brand, vice-president and general manager. Plans to avoid failure through distribution of risks. At the time the article was written the company had already acquired \$3,000,000 worth of properties producing fruit and had options on \$3,000,000 worth in addition. The names of many of the orchards taken over in various parts of the country are given. The plan was to have the former owner remain as manager.
22. Dean, William Harper. How strong is the chain orchard? Some opinions and side lights on the \$50,000,000 syndicate. (In Country Gentleman, v. 84, no. 40, Oct. 4, 1919, p. 8, 40, 42) 6 C833
Tells of the American Fruit Growers, Incorporated.
23. Doane, D. Howard. Farm organization for modern machinery. (In Agricultural Engineering, v. 10, no. 1, January, 1929, p. 27-30)
Paper presented at a meeting of the Power and Machinery Division

of the American Society of Agricultural Engineers, at Chicago December, 1928.

In discussing the need for adjusting farm organization for modern machinery, Mr. Doane gives in detail a report such as the Doane Agricultural Service would give to the farmer asking for advice as to the management of his farm.

24. Doane, D. Howard. Problems of agricultural estate management. (In Journal of Land and Public Utilities Economics, v. 3, no. 2, May, 1927, p.185-188)

The author points out some of the problems of estate management which he has found through his experience with the Doane Agricultural Service, must be considered.

25. Dobbins, E. T. Factory-izing the farm. (In Barron's, March 26, 1928, p. 18)

The author, after stating that "factory-izing the farm means putting machinery at work to reduce unit cost of production," mentions briefly various types of modern machinery and their effect on farming methods.

26. Dufford, Frank. Dufford's corporation farming: a plan. 1920. 16 p. 281 D87

The author believes that corporation farming is the only solution for the farm problem.

27. Duke, T. W. Integration of the business of agriculture. (In Commerce and Finance, v. 16, no. 45, Nov. 9, 1927, p. 2308)

Suggests the forming of large land holding corporations which would control great farms situated in different sections of the country.

28. Ford, Henry. My philosophy of industry ... (An authorized interview by Fay Leone Faurote) New York, Coward-McCann, 1929. 107 p. 280 F75

In a brief section entitled: A New Age for the Farmer (p.8-10), Mr. Ford writes: "Large corporations, whose sole business it will be to perform the operations of plowing, planting, cultivating, and harvesting, will supersede the individual farmer, or groups of farmers will combine to perform their work in a wholesale manner. This is the proper way to do it and the only way in which economic freedom can be won."

29. Ford, Henry. Today and tomorrow. By Henry Ford in collaboration with Samuel Crowther. Garden City, N. Y., Doubleday, Page and co., 1926. 281p. L. C.

Mr. Ford, in his chapter: Farm Problems are Farm Problems, writes: "It is an utter waste of time and effort to keep live stock in small units, and the farmers can earn far more out of shares in community livestock poolings than they could ever hope to earn out of tending small herds of their own." Other forms of farming he considers part-time jobs which should be combined with industry.

30. Fuller, F. E. Supervised tendancy - new trend in farming. (In Frairie Farmer, v. 100, no. 48, Dec. 1, 1928, p. 1647, 1686.)
A discussion of group management of farms by efficient managers.
31. Gillette, John M. Changing relations between town and country. (In American sociological society. Papers and proceedings. 22d, 1927, p. 111-119) 280.9 Am37
From present indications it looks as if improved machinery would result in capitalistic farming of the factory type, but the author believes that the family farm is "the best mode of farming for all concerned."
32. Gold, Guy D. La administración de un gran establecimiento de grande lechero.. (In La Hacienda v. 18 no. 10, Oct. 1923. p. 301-302)
A description of the Meridale Farms, the largest dairy farm of Jersey cows in the eastern part of the United States.
33. Grantham, A. E. Advantages of big over little farms. (In Practical Farmer, v. 115, no. 3, Feb. 1, 1919, p. 40)
Points out the advantages in buying and selling which result from organized farms under central management.
34. Harger, C. M. Farm companies a new venture. (In American bankers association. Journal, v. 21, no. 6, Dec. 1928, p. 571-572, 596)
After describing various methods used by companies wishing to dispose of foreclosed farms the author concludes, "The farming company, under whatever guise, does offer a present way out and this accounts largely for its rise. That it is to be a permanent factor of the nation's agricultural life is doubtful - and certainly it is not conducive to American ideas in community life."
35. Harvey Fisk & Sons. The tractor industry and its part in power farming, with descriptions of Allis-Chalmers Manufacturing Company, Caterpillar Tractor Co., Hart-Parr Company, Minneapolis Steel & Machinery Company. N. Y., Harvey Fisk & sons, 1929, 35 p.
The scope and purpose of this pamphlet are outlined as follows by this firm which is trying to interest investors in the stock of the companies listed: "American farming is moving rapidly toward mechanization. Makers of agricultural power machinery, in consequence, are enjoying a period of prosperity that appears to be still in its inception.
"The tractor is the keystone of power farming. In the belief that the tractor industry and the companies in it should be better known to investors, we have undertaken a thorough study of the field, which we here present." One section is entitled: Trend Toward Larger Farms.

36. Holmes, C. L. Growing pains of the family farm (In Country Gentleman, v. 94, no.5, May 1929, p. 25, 117) 6 C833

Dr. Holmes concludes as follows:

"As already pointed out, growth in the use of resources of the family farm means an added demand for capital. How shall this capital be obtained? To be sure if this farming responsibility falls upon the better men these men are going to be able to accumulate capital more rapidly than does the average farmer. Notwithstanding this, recourse will have to be had to other means of obtaining capital. Will the farm mortgage be an adequate means for this, or must recourse be had in many cases to incorporation as a means of enlisting additional capital? This phase of adjustment is fraught with a great deal of difficulty.

"Another important problem is that of the new community life which will develop. The church, the school and the rural club must find a wider geographic basis for their membership. The hope is for better talent, and there is possibility of a richer community life. There will be need, however, for a new spirit of cooperation, and a more acute sense of social and community responsibility.

"In many ways, the greatest problem of all is the pain of the transition period, the readjustment of the individual farm unit to new forms of organization and new methods of operation. This is the individual side. The collective side makes itself manifest in the problem of surplus agricultural population and the transfer of this surplus to other occupations, into a new and satisfactory social and economic environment."

37. Holmes, C. L. Prospective displacement of the independent family farm by large farms or estate management, and the socio-economic consequences. (In Journal of Farm Economics, v.11, no.2, pt.1, April 1929, p. 227-247)

This paper was read at the 19th annual meeting of the American Farm Economic Association, Chicago, Dec. 1928.

A digest of this article is contained in the Louisiana edition of the Bureau Farmer, July, 1929, p. 16.

The technical developments of agriculture, such as the use of improved machinery and the application of genetics to crop breeding, and chemistry and physiology to the scientific feeding of animals "magnify the importance of highly intelligent and forceful proprietorship." This raises the question as to whether large-scale farming will be the medium through which a higher class of entrepreneurship will develop. From the study of the development of large-scale farming operations it appears that there are two general forms. "The one is large-scale proprietorship on the basis of ownership of land and the ownership of all or a part of the other resources, operating either on the basis of hired labor or very closely supervised leasehold. The second is organizational and managerial service under multiple ownership of land, for the

most part on a rental basis." It is the second type which the writer believes will increase more and more and will "be a tremendous boon to the tenant class and to the agricultural industry as a whole. However, the large-scale system may not become the dominant form for many years." After suggesting the qualifications and training of the "super-managers" or "agricultural proprietors" the writer predicts that with a sprinkling of such managers in the community both the social and economic conditions will be improved.

38. Hoover, Herbert. Address of acceptance of the Republican nomination for President... To be delivered at the Stadium at Stanford University, California, Saturday, August 11, 1928, at 4 p.m. (Pacific Time) [n.p., 1928] 13 p. Pam. Coll. Also printed in full in the press of August 12, 1928.

In this speech, Mr. Hoover said, "Farming is and must continue to be an individualistic business of small units and independent ownership. The farm is more than a business; it is a state of living. We do not wish it converted into a mass production machine."

39. Institute of politics, Williams College. An American agricultural policy. (In its Report of the round tables and general conferences at the 7th session, 1927, p. 151-172) 280.9 In72

Mr. Henry A. Wallace was chairman of this section of the conference which puts itself on record as favoring the family-sized farm rather than large scale or corporation farming.

40. McKelvie, Sam R. Can the farm be factory-ized? (In Nation's Business, v. 15, April 1927, p. 106 and others; excerpts in Advertising and Selling v. 8, p. 30; March 9, 1927; Commerce and Finance, v. 16, p. 507-508, March 9, 1927; Commercial West, April 16, 1927, p. 24-25. In favor of industrializing the farm.

41. McKelvie, Sam R. Can the farm be factory-ized? An address delivered before the Farmers' Equity Creamery Convention at McCook; the Kansas City Traffic Club; and the Central Division Meeting of the United States Chamber of Commerce. (In Nebraska Farmer, Feb. 12, 1927, p. 237, 252)

Practically the same article as the one of same title in Nation's Business, April 1927.

42. McMillen, Wheeler. Too many farmers; the story of what is here and ahead in agriculture. N. Y., W. Morrow & Co., 1929. 340p. 281 M22

The author writes: "Agriculture needs more of the corporate type of business organization in carrying on production. Corporation farming, bringing into agriculture new capital, diffusing expert management over more men and wider areas, concentrating the advantages of large-scale operation, promises a brighter day wherever it can be applied." The following farms are mentioned, Walker-Gordon dairy farms at Plainsboro, New Jersey; hog farms managed by F. M. Ballard at Marion, Indiana, the United Fruit Company farms and others.

43. McMillen, Wheeler. Shall we make factories of our farms (In Farm and Fireside, v. 52, no. 3, March 1928, p. 7, 45-46)
Favors industrialized farms.
44. Mead, Edward S., and Ostrolenk, Bernhard. The farm problem: mass production threatening efficient small farmer. (In Annalist, v. 32, no. 817, Sept. 14, 1928, p. 391, 413)
The authors claim that the efficient large scale producers will drive out the small farmer even though he too is efficient.
45. National farming corporation. Farming on a business basis. New York, 98 Chambers St., [1920] 30 N Pam. Coll.
A description of this agricultural service which offers farm management and accounting service.
46. Nourse, E. G. The business farmer and the new agriculture. Washington, D. C., Whaley-Eaton Service, 1929. 27 p. (Whaley-Eaton Pamphlets, v. 4, no. 9, Feb. 15, 1929) 58 N85
Dr. Nourse writes in part as follows:
"Personally, I have many reasons, too lengthy to present here, why I feel that the development of very large-scale or so-called corporation farming will be quite sharply limited. On the other hand, I do not think that we can continue to do quarter-section jack-of-all-trades farming after the tractor has come to set this new pace in terms of business organization for power farming. Farmers will work out their own answers to the problem in their own ways. Already we are seeing it coming in many sections where the farmer who is a good manager is taking advantage quickly and fully of the possibility of putting the new mechanical equipment to work on his farm and then of buying or renting the additional acreage to use this equipment most efficiently. In this process he is first putting himself out of the field-worker class and into the business-manager class. He is finding that he can handle much larger acreages with the former number of farm-hands, and, perhaps, is hiring one additional specialized worker as a sort of master mechanic - although neither of them would think of using this term.
"At the other extreme, the farmers who are financially unable to purchase these aids to lower production costs and who, for other reasons, are losing out in the keen competition of the modern farming game, are drifting out of agriculture into other lines of work or are passing into the position of wage workers for those with more capital resources and managerial ability.
"It would not be very difficult to draw a picture of partnership arrangements in farming which are suited to the demands of the new agriculture. Likewise, it is sometimes proposed that cooperative ownership of machinery or even cooperative farming of large land units could be developed. Fractical experience seems to indicate, however, that the individualistic farmer does not work any too well in either partnership or co-operative harness. I

fancy that we shall see actual results obtained under keenly competitive conditions in which the good farm manager pushes forward and the poor farm manager is pushed down to a wage basis or out of the business."

47. Nourse, E. G. Economic issues of large-scale farming. (In Agricultural Engineering, v. 10, no. 1, Jan. 1929, p. 13-17)

Paper presented at the meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, December, 1928.

Discussing large-scale farming from an economic point of view, Dr. Nourse points out that "from the mechanical side agriculture does not present an imperative demand for large-scale farming at all comparable to that of industry or mechanical pursuits such as transportation." From the labor side there is reason to think "that the farm needs only to become a three or four-man farm to permit of a labor specialization which will approach maximum efficiency in the utilization of modern mechanical equipment on the same basis of labor cost as now obtains for farm work." Turning to the commercial demands of agriculture, he points out that "the real economic demand for large-scale organization in agriculture" is in the need for having "the function of management differentiated from that of the actual operative processes of the farm if we are to take advantage of the technological possibilities which lie in the path of modern scientific and commercial agriculture." After discussing how fast we should move toward corporate organization in farming, he writes, "While one has no more than opinion to back assertion, I am myself confident that we shall see an increasing number of large-scale operations in agriculture and that the movement toward so-called corporation farming could readily progress at a rapid rate were the difficulties in its way merely of a technological character ... The real difficulties which will, I think, prove a definite and rather drastic check upon any considerable expansion of really big farming operations under theegis of the corporation, come not in the way of operative difficulties but on grounds of costs, prices, and competition. All three of these are but phases of a fundamental weakness of agriculture as a field for promotional development."

48. Nourse, E. G. The revolution in farming. (In Yale Review, v. 8, no. 1, Oct. 1918, p. 90-105) L. C.

Dr. Nourse writes, "In brief, the modern industry of agriculture demands technical skill, training, equipment, credit facilities, and commercial contacts such as the individual farmer cannot possibly supply for himself. Efficiency in these directions is to be attained, as in other industries, only when certain phases of the business are taken over and provided for by larger units of organization. In some instances the corporate form of enterprise is capable of doing this, and is, therefore, finding a place for itself within the field of agriculture. But in the larger

number of cases, this consolidating movement is being brought about through co-operative associations. These, while leaving the task of routine operation to private enterprise, furnish an effective means of pooling certain commercial, financial, and executive functions for joint administration."

49. O'Neal, Charles D. Solving the farm problem. A plea for the application of the corporate plan of organization to the industry of agriculture. (In Manufacturers Record, v. 90, no. 8, Aug. 26, 1926, p. 67-69) 297.8 M31

The author believes that just as mergers have aided big business so "the farming corporation offers a way out of the embarrassing and difficult situation of agriculture today."

50. Price, Theodore H. The industrial reorganization of agriculture. (In Outlook, v. 117, no. 5, Oct. 3, 1917, p. 176-177) L. C.
In favor of the factory system for the farm. This article received adverse criticism from A. B. Roberts in the Rural New Yorker, Nov. 17, 1917.

51. Pugsley, C. W. Agriculture of tomorrow. (In Commercial West. v. 55, no. 22, June 8, 1929; p. 17, 74)
After reviewing some of the factors entering into the farm problem, Mr. Pugsley concludes with a brief statement in regard to what he considers "the immediate trend in the large agricultural regions of the midwest" toward larger farm units. He is inclined to think that this "means larger farms owned or operated by the individual farm family" rather than syndicate farming or large cooperative farming.

52. Reynolds, W. W. A change to industrialization in farming. (In Rural New Yorker, v. 76, no. 4459, Dec. 8, 1917, p. 1391-1392)
Thinks this change will be necessary because young people are leaving the farms in such numbers that old methods can not continue.

53. Ridgway, Frank. Must the farm be industrialized? (In Bureau Farmer, v. 4, no. 6, Feb. 1929, p. 7-8)
The editor invites his readers to reply to this article which points out some of the arguments in favor of the industrialized farm. The answers to Mr. Ridgway's article are summarized in the Bureau Farmer for June, 1929, p. 9, 35-36.

54. Roberts, A. B. The factory system in farming; what it would mean to America. (In Rural New-Yorker, v. 76, Nov. 17, 1917, p. 1315)
Comment on Theodore H. Price's article: The Industrial Reorganization of Agriculture in the Outlook for Oct. 3, 1917. Mr. Roberts regards the factory system advocated by Mr. Price as a menace to the quality of the farming population. The editorial comment agrees.

55. Rowley, Scott. Do we need corporation farming. An argument for putting corporation methods into agricultural production. (In Wallaces' Farmer, v. 53, no. 10. March 9, 1928, p. 376)
56. Rubinow, S. G. Putting the factory on the farm. (In Current History, v. 30, no. 6, Sept. 1929, p. 1052, 1069- 1074)
The author believes that we are "facing now the era of industrialized agriculture" which is one of the keys to the agricultural problems.
57. Smith, Edgar L. Corporate farming. (In American farm management association. Record of the proceedings. 8th annual meeting, 1917, p. 47-57) 4 Am33
The author believes that corporate farming offers a great opportunity for farmers with managerial ability and the financial world should therefore be encouraged to support this kind of corporation.
58. Steen, Herman. Corporations farm many American acres; agricultural enterprises carried on by companies have notably increased in the regions where wheat, corn or cotton crops are grown. (In New York Times, Sunday, May 26, 1929, XX, 11)
The author states that many large scale or corporation farms are "either playthings or branches of some other concern which often pays the bills." There is, however, an increasing number of what he calls "dirt farm corporations." Whether large-scale farming succeeds or not "farming in the future will be a business for men skilled in management, in finance, in mechanics, and in the science of production."
59. Stewart, Robert. The farming business. (In Atlantic Monthly, v. 141, no. 6, June 1928, p. 832-839)
This article describes the following large-scale and corporation farms as illustrations to show what can be done "when capital is available in sufficient quantity and able management can be obtained"; the Campbell Farming Corporation with 95,000 acres in wheat at Hardin, Montana, and operated by Thomas Campbell, "a real captain of the farming industry"; John W. Scott's 900-acre diversified farm at Gilby, North Dakota; Frank I. Mann's 500-acre diversified farm, Bois D'Arc near Gilman, Illinois; Arthur J. Mason's alfalfa farm at Flossmoor, Illinois; and the Berkeley Olive Association formed by 28 professional men at San Francisco, Berkeley and Reno for the efficient management of 502 acres of olives in California.
60. Stokdyk, E. A. Corporation farms or peasantry? (In Northwestern Miller, v. 153, no. 10, March 21, 1928, p. 1092) 298.8 N81
After discussing various factors involved in corporation farming the author concludes that "the family farm will no doubt continue to be the foundation of American agriculture. The size of the unit will center around the number of acres that one set of equipment can handle in a season."

An editorial comment on this article on p. 1093 is more optimistic about the advantages of corporation farming than Mr. Stokdyk.

61. Taber, Louis J. A year of real accomplishment. Annual address ... (In National Grange Monthly, v.25, no.12, Dec. 1928, p.4, 17 and others)

In Mr. Taber's annual address made at the meeting in Washington, December 1928, he discusses corporation farming. He writes in part as follows:

"Our present increase in tenantry is serious, but absentee corporation ownership would be more serious. It would destroy the independence of agriculture; it would interfere with training of the youth; it would detract from community life and give to agriculture along with the advantage of larger units, many disadvantages as well. It would inject a labor problem into agriculture. It would give us a managerial class and make for distinctions that are neither helpful nor wise."

62. Taylor, E. H. How many farms can one man run? (In Country Gentleman, v. 93, no.10, Oct. 1928, p.3-4, 120,123)

This is the first of three articles on manager farming. It is said to be based on a study of the following enterprises: Midwest Canning Corporations farms at Rochelle, Illinois; livestock farms of F. E. McArthur at Oakland, Iowa; livestock farms managed by J. M. Dowell, near Champaign, Illinois; Sibley farms (grain) Illinois; farms managed by Feters Trust Company at Omaha, and the Doane Agricultural Service at St. Louis; Brenton Brothers at Dallas Center, Iowa; Ernest Thornburg at Shelbyville, Indiana; and the Lyons farms at Brook, Indiana.

63. Taylor, E. H. The pursuit of profits. (In Country Gentleman, v.93, no.11, Nov. 1928, p. 12-13, 65, 67)

This is the second of this series of articles. Many of the advantages gained from group management of farms are pointed out.

64. Taylor, E. H. Again - the new agriculture; tenants and their chiefs tell how manager farming works. (In Country Gentleman, v.93, no.12, Dec. 1928, p. 12, 51, 53)

This third and last article in the series points out the advantages of group-management of farms from the standpoint of both the tenant and the manager.

65. Taylor, H. C. Agricultural estate management. (In Journal of Land and Public Utility Economics, v. 3, no. 2, May, 1927, p. 183-185)

After pointing out the need for men trained for estate management, Dr. Taylor suggests training for such managers.

66. Taylor, Nelson. The farmer and his city cousin. Boston, The Christopher publishing house [1928] 101p. 281 T212
As a remedy for the evils of the present day the author recommends the incorporation of farm communities "into corporate districts for cooperation in the conduct of all branches of agricultural pursuits."
67. Thompson, John G. Mobility of the factors of production as affecting variation in their proportional relation to each other in farm organization. (In Journal of Political Economy, v. 29, no. 2, Feb. 1921, p. 108-137) Also issued as a reprint. Pam. Coll.
Under the heading the mobility of land as a factor in farm organization, the author discusses the advantage of large estates in regard to the adjustment of the size of farms. Under mobility of management he discusses the partnership in agriculture, the corporation in agriculture, the cooperation among farm operators, and share tenancy.
68. U. S. Bureau of the census. Reports.
For statistics of the average acreage of farms by states see the decennial Census Reports and United States Census of Agriculture, 1925.
69. U. S. Office of internal revenue. Statistics of income. Comp. from the returns for 1916-1927. Washington, Govt. print. off., 1918-1928. 151.5 St2
This report gives each year from 1916 to date the income returns from corporations engaged in agriculture and related industries.
70. Van Schoik, A. B. Will future farming be done by corporations? (In Michigan Farmer, v. 171, no. 12, Sept. 22, 1928, p. 271, 279)
A similar article by the same author was issued in Kansas Farmer, v. 66, no. 41, Oct. 13, 1928, p. 14.
In concluding his article the author writes, "We can expect that within the next five years there will be a rapid increase of farm corporations and when they come we will not fear them any more than we now fear large industrial corporations where the stock is owned by the public."
71. Wallace, L. W. Agricultural contrasts (In American academy of political and social science. Annals, v. 142, no. 231, March, 1929, p. 235-244)
The author concludes this article as follows:
"Two general groups of statistics have been given in this article. The first group shows that there is a wide variation in the results being obtained from numerous ^{farm} operations. The second discloses that through the application of modern farm equipment and the greater utilization of mechanical and electrical

power, marked economies are being realized. The second group, in part accounts for the wide variations of the first group. It is not correct to assume, however, that all of the variations are due to the use of modern machinery and power. Other factors have had their influence. Perhaps the one of the greatest importance is improved farm management. However, it is the better type of farm manager who takes advantage of all improvements available. This type of farm manager is making profits.

"The study of such data as are herein presented gives rise to some conclusions. They cannot be said to be wholly accurate because there is not available a sufficient body of data to make that degree of analysis necessary to draw unquestioned conclusions. There is sufficient evidence, however, to give considerable weight to such as the following: Increased yield and therefore income, per worker, comes through the use of more power and machinery. Industrial methods and practices, when intelligently adapted to agriculture, are profitable devices. The best practices and results, not averages, should be known and emulated. It is a fallacy to compare performances with averages. No distinct accomplishment, in any walk of life, is realized by so doing. The 100-yard runner does not endeavor to beat the average, but the best time on record. Management, as broad in its conception and execution as the best in industry and commerce, when applied to agriculture, realizes profits comparable with those of industry and commerce. There is no means of protecting the inefficient farmer from the competition of the efficient.

"Does not the solution for unprofitable farm operations lie in the direction of applying those engineering and management principles and practices which have given to this nation an industrial supremacy and satisfaction the like of which has never been known?"

72. Whipple, Howard. Problem of the bank-owned farm. (In American bankers association. Journal. November, 1929, p. 447-448, 518-520)

This article tells of the advantages of the formation of a land company to handle the foreclosed lands in the hands of the banks.

73. White, Wallace B. Corporation farming and the feed dealer. (In Grain World, v. 101, no. 5, Feb. 27, 1929, p. 52) Similar article in Co-operative Manager and Farmer, v. 18, no. 7, March 1929, p. 66-67.

In concluding this short article, the author writes, "The farm corporation, in order to be a success, will have to employ up-to-date and scientific farming methods, among which feeding plays a great part. As stated before, the feed dealer who is prepared to offer these farm managers, supervisors, or tenants reliable information and advice; is the one who will gain many satisfied and profitable customers."

74. White, Wallace B. Corporation farming should increase the feed dealers business. (In Co-operative Manager and Farmer, v. 18, no. 7, March 1929, p. 66-67)
Practically the same as the author's article in Grain World, v. 101, no. 5, Feb. 27, 1929, p. 52.
75. White, Wallace B. The trend toward corporation farming. (In Grain World, v. 101, no. 4, Feb. 13, 1929, p. 60)
The various forms of corporation farming have this in common that "the manager or supervisor makes it his business to see that up-to-date and scientific farming methods are used by the tenants, share-holders, or co-operators, and that production is closely correlated with the demand of farm markets. It is in this respect that this new movement is likely to influence the feed business." The feed dealers have an opportunity to recommend the best feeding practices.
- 75a. Yerkes, Arnold P. Individual or corporation farming? (In Power Farming, v. 29, no. 6, p. 11-12, June, 1920) 58.8 T41
"The farmer is facing the same conditions as the city business man and it is up to the individual farmer to decide whether he will farm on a larger and more profitable basis or allow large corporations to become his competitor."
76. Yerkes, Arnold P. Relation of large machine units to production. (In American society of agricultural engineers. Transactions. v. 12, 1919, p. 136-150; Same condensed in American Thresherman, v. 21, Feb. 1919, p. 7-9, March, 1919, p. 28-29) 290.9 Am 32 1919
The author concludes. "Let's boost for the farm which is large enough to permit of the efficient use of modern equipment and where a high production per man is obtained through the use of large machine units, the kind of farm which is most profitable to the farmer and to the country."

NORTH CENTRAL STATES.

77. Grimes, W. E. Effect of improved machinery and production methods on the organization of farms in the hard winter wheat belt. (In Journal of Farm Economics, v. 10, no. 2, Apr. 1928, p. 225-231)
This paper was read at the 18th annual meeting of the American Farm Economic Association at Washington, D. C., December, 1927.
The use of improved machinery tends to increase the size of farms in the winter wheat belt.
A continued increase in size of farms would develop new credit, land tenure, and marketing problems.
78. Grimes, W. E. The effect of the combined harvester-thresher on farming in a wheat growing region. (In Scientific Agriculture, v. 9, no. 12, Aug, 1929, p. 773-782)
A lecture at the ninth annual convention of the Canadian Society of Technical Agriculturists, Winnipeg, Manitoba, June 15, 1929.

While the use of the combined harvester-thresher in the Great Plains area of the United States has resulted in larger family-sized farms, the author thinks that there has not been as great an increase of farms operated under corporate management as one would think from the amount of publicity given to this type of farming. The changes which have come with the new machinery present a challenge to the research worker.

79. Nelson, J. Ward. Future trend of farming in the Middle West. (In Agricultural Engineering, v. 10, no. 1, Jan. 1929, p. 24-26)

Paper presented at a meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, December, 1928.

The author concludes his paper as follows:

"The comparisons attempted in this paper have been made between the two extremes of agriculture - the family system and the corporation system. My experience has qualified me to discuss these. Farm management services acting between the owner and tenant are becoming quite common. In some ways, this type of organization combines the strong features of both the family and corporation systems. It is, however, better adapted to tenantry than to farms operated by the owner. It provides a medium for well-trained and capable farm managers to direct the farm practices in a general way. Under this system the personal interest of the man directly operating the farm is assured, though not to the extent of the family-owned and family-operated farm. No doubt it will lead to greater profits for both the owner and tenant. The advantage of economy of operation of power and machinery by the corporation system is in a large measure lost. The desire of ownership of our people is very strong and must be reckoned with in this connection. This type of service will continue to exist, but I do not think it will entirely replace the family-owned and family-operated farm."

80. Weymouth, George. Aetna life goes farming; big insurance company takes plunge involving millions in agricultural operations. (In Farm Life, v. 48, no. 7, July 1929, p. 12)

A concise statement of the system of chain farms operated by the Aetna Life Insurance Company at Hartford, Connecticut. The company has about 600 farms secured through foreclosure in Illinois, Indiana and Ohio. The farms are under the general management of Mr. Hudson Burr, who has under him inspectors managing about sixty farms each. Farmers are hired "on straight salary to operate each individual farm." It is planned in time to put the managers on a share basis and eventually to put the company out of the farm business.

81. Young, E. C. Economic aspects of the administration of groups of farms under northern conditions. (In Journal of Farm Economics, v. 11, no. 2, pt. 1, April 1929, p. 248-265) An article compiled from this paper was published in Rural Business, v. 1, no. 4.

Oct. 1929, p. 39-43

This paper was read at the 19th annual meeting of the American Farm Economic Association at Chicago, December, 1928.

It is a discussion of the various forms of group management in the North Central States. In the discussion following the paper O. G. Lloyd told of two groups of farms successfully operated by two different managers. The data on which he based his remarks covered a period of ten years.

SOUTHERN STATES.

82. Brannen, Claude O. Relation of land tenure to plantation organization, with developments since 1920. Fayetteville, Ark., 1928. 85p.

Thesis (Ph.D.) - Columbia university.

"This study of the plantation system was begun in 1920 and Part I was published in 1924 by the Bureau of agricultural economics, United States Department of Agriculture, as Department Bulletin no. 1269. See item no. 89. Part II is the result of a more recent study, mainly of published materials, of developments in plantation areas since 1920."

In concluding Part II Dr. Brannen writes "To summarize, the plantation system in the western cotton belt and in the sugar-cane and rice areas continues since 1920 practically unmodified. But in southeastern states the further decadence of the plantation system, partly as a result of competition from vast areas of new land for cotton in the west and partly due to the persistence and the spread of the boll weevil, is accentuated. The scarcity of labor has also been a contributing factor, but the scarcity of labor is partly an effect rather than entirely a cause. The decline in staple crop production and the substitution of other crops combined with the change in labor supply indicates a further step toward decadence. Not that favorable land under competent management will not continue for some time to be operated as plantations, but plantations in the less favored localities have already disappeared, and unless conditions change others will follow. In all areas, as labor becomes scarcer and more competent for independent management, and especially where production of the staples becomes highly uncertain, the consequence is decadence and finally disintegration of the plantation system."

83. Lever, A. F. Three ways out. Better things lie just ahead for the small cotton farmer. (In Country Gentleman, v. 94, no. 5, May, 1929. p.3-4, 132-133.)

Ever since the invention of the cotton gin the small cotton farmer has been the victim of conditions which he could not control. He has inherited the methods and practices of the old slave system of cotton production. He has clung to the one-crop system in spite of advice as to its dangers, in most cases because he has had no near-by market for other crops. Cotton farming is tending toward

large scale production. This will result in better remuneration and better days for the more competent of the present small operators. The increasing industrialization of the South will create a demand for products which he has not hitherto been able to sell.

84. Pope, J. D. Issues involved in the readjustment of farm organization in the cotton belt. (In Journal of Farm Economics, v. 11, no. 2, pt. I, A.R. 1929, p. 266-283)

This paper was read at the 19th annual meeting of the American Farm Economic Association, at Chicago, December, 1928)

The tendency in the Southeast is toward intensive rather than extensive farming and the family-size farm.

85. Shockney, Don F. The cost of big farming. Average yields won't meet the corporation pay roll. (In Country Gentleman, v. 78, no. 37, Sept. 13, 1913, p. 1321-1322.) 6 C833

Gives analysis of corporation farming costs and actual operating expenses on plantations in the South.

86. U. S. Bureau of the Census. Plantation farming in the United States. Washington, Govt. print. off., 1916. 40 p. 157.41 F69

A special study of the plantation system of the South based on the returns published as Chapter 12, vol. 5 of the Thirteenth Census Reports, 1910.

87. U. S. Congress. Senate. Committee on irrigation and reclamation. Creation of organized rural communities to demonstrate the benefits of planned settlement. Hearings ... 71st Congress, 1st session on S. 412 ... May 14 and 15, 1929, Washington, Govt. print. off., 1929. 39p. 282.2 Un32

Contains a statement by Hugh MacRae about the Castle Haynes colony in North Carolina and a statement by Burdette Lewis about the J. C. Fenney-Gwinn Corporation in Florida.

88. U. S. Congress. House. Committee on irrigation and reclamation. Organized rural communities. Hearings ... 70th Congress, 1st session on H. R. 8221 by Mr. Crisp. A bill to authorize the creation of organized rural communities to demonstrate methods of reclamation and benefits of planned rural development. January 26 and 27, 1928. Washington, Govt. print. off. 1928. 81p. 31.3 Un 352.

Contains statements by Mr. L. J. Folse and J. Ed. Ruff on land settlements in Mississippi; by Mr. Burton (i.e. Burdette) Lewis on the Fenney-Gwinn community in Florida; by Mr. Hugh MacRae on the settlements in North Carolina; and others.

89. United States Dept. of Agriculture. Brannen, Claude O. Relation of land tenure to plantation organization. Washington, D. C., 1924. 78p. (U. S. Dept. Agr. Bul. 1269)

Also published as part 1 of Dr. Brannen's thesis. See item no. 82.

The conclusions reached by this study are briefly summarized as follows: "It is evident from the foregoing discussion that the plantation has certain distinctive characteristics. The most important of these are the degree of specialization in staple crop production as distinguished from the more or less self-sufficing small farm, and the degree of control exercised over the labor and product. The system was founded on the basis of cheap land, cheap labor, and climatic conditions favorable to the production of the staple crops. The system has continued partly by inertia, partly because of its efficiency, and partly because some of the conditions that made for its establishment and growth still remain. Its usefulness, under existing conditions, lies in its ability to make profitable use of land which could not be economically employed in small tracts, and to give profitable employment to labor that is not capable of economical production under self-direction. The weakness of the system lies largely in the practice of exploiting the land for immediate money returns and in the tendency to perpetuate large-scale farming and tenancy as against giving encouragement to smaller owner-operated farms." p. 67.

90. United States Dept. of Agriculture. Knapp, S. A. Causes of southern rural conditions and the small farm as an important remedy (In U. S. Dept. Agr. Yearbook, 1908, p. 311-320)

The author believes that the breaking up of the old plantations into small farms would be an advantage to the South.

ALABAMA.

91. McClung, Littell. Seventy-five mile city; what Henry Ford wants to do with Muscle Shoals and why he wants to do it. (In Scientific American, v. 127, Sept. 1922, p. 156-157, 213-214) 270 Sci 25.

A description of Mr. Ford's plan to have the factory sites so located that the workers could have homes on small farms. There would be an experienced farm demonstrator to give advice and the company would own machinery to be rented to the farmers.

CALIFORNIA.

92. Briggs, C. A. The James Mills orchard corporation. (In California Cultivator, v. 47, no. 20, Nov. 18, 1916, p. 484)

6200 acres under corporation management. The article is less than a half page in length and is quite general in character.

93. California. Commission of immigration and housing. A report on large land-holdings in Southern California. Sacramento, California

state printing office, 1919. 43 p. 282 C132

Based on tax records of the counties and on a table showing land holdings (2,000 acres or more), Oct. 1, 1916 on p. 278 of the California Report of the State Tax Commission, 1917 (252.09 T19)

94. Crow, Carl. A new eight million dollar crop. (In Country Gentleman, v. 82, no. 41, Oct. 13, 1917, p. 10-11, 35) 6 C833
5,000,000 bushel rice crop in the Sacramento Valley of California. The different tracts devoted to this purpose vary in size from 400 to 5,000 acres.
95. Dryden, James. Biggest hen farm. (In Country Gentleman, v. 85, no. 2, Jan. 10, 1920, p. 6-7, 90) 6 C833
J. R. Corliss has a flock of 30,000 hens near Petaluma, Calif.
96. Grunsky, C. Where Hoover meets the farm problem from within. (In Magazine of Business, v. 55, no. 4, April, 1929, p. 415, 474)
A brief account of the Hoover Farm, or the Foso Land and Products Company near Wasco, California. It is a diversified farm of 1,260 acres.
97. Hodges, R. E. Biggest hog ranch in the world. (In Pacific Rural Press, v. 110, no. 3, July 18, 1925, p. 54) 6 P112
A brief account of the Fontana Farms Company which operates hog ranches at Declez and Wade in San Bernardino County and old Diamond Bar ranch in Los Angeles County, California.
98. Lyons, Robert T. Dairying on big scale; Adohr farm is the largest certified milk farm in the world. (In Hoard's Dairyman v. 73, no. 5, March 10, 1928, p. 226)
A description of the Adohr stock farm near Los Angeles, California.
99. MacLaren, J. R. Una granja modelo del Presidente de los Estados Unidos. (In La Hacienda, v. 24, no. 3, March 1929, p. 104-105) 6 Y11
A brief description of President Hoover's model ranch of 1,280 acres at Wasco, California.
100. Neilson, Carol K. Industrialized agriculture: a peach "ranch". (In Commerce and Finance, v. 17, no. 13, March 28, 1928, p. 691-692)
A brief description of the California Packing Corporation's peach ranch in San Joaquin Valley, California.
101. Newman, Ralph. Where a big thing is being done in a big way. (In Pacific Rural Press, v. 107, no. 12, March 22, 1924, p. 411) 6 P112
A description of the California Orchard Company near King City in the Salinas Valley, California. On this ranch there are 265 acres of almonds, 90 acres of walnuts, 300 acres of pears, 290 acres of apricots, 250 acres of apples, 150 acres of peaches, 160 acres of prunes, 50 acres of plums, and 75 acres of grapes.

102. Pickett, John E. New President's Kern County farm. (In Pacific Rural Press, v. 117, no. 8, Feb. 23, 1929, p. 238, 247)
A description of the Hoover Farm near Wasco, California, a 1,260 acre diversified farm operated by hired labor under the management of Leslie W. Symmes.
103. Rice, Archie. Herbert Hoover's farm. (In Wallaces' Farmer, v. 53, no. 42, Oct. 19, 1928, p. 1432)
A brief description of Mr. Hoover's farm near Wasco, California.
104. Stewart, Robert. Big business methods for the farm. (In American bankers association. Journal, v. 18, no. 12, June 1926, p. 842, 845-846)
Although certain types of farming are not suited to the corporate form of management, certain other types may develop along corporate lines. An example of such an organization is the Berkeley Olive Association near Oroville, California, which has been in existence for twelve years. The form of organization is described.
A similar article by the same author was published in the Independent, v. 121, no. 4089, Oct. 13, 1928, p. 344-346. An abstract of the article by O. B. Jesness was published in Social Science Abstract, v. 1, no. 1, March, 1929, p. 57.
105. Stewart, Robert. A cooperative that produces. (In Nation's business, v. 17, no. 2, Feb. 1929, p. 210-212)
The Dean of the College of Agriculture, University of Nevada, discusses the Berkeley Olive Association near Oroville, California, "a cooperative organization for the production, planting and management of a group of olive groves in California. This Association consists of 28 members who are professional men and women connected with the Universities of Nevada and California and engaged in the practice of their profession in Berkeley, San Francisco, Palo Alto or Reno."
- 106
/ Stewart, Robert. Size of the farm business. (In Commonweal, v. 9, no. 12, Jan. 23, 1929, p. 336-337)
The author points out the advantages of larger farm units and describes the Berkeley Olive Association of Oroville, California, as "the unique merger of a group of small farms."
107. Tilden, Freeman. How President Hoover farms. (In World's Work, May 1929, p. 80-84)
A description of the Hoover Farm, Wasco, Kern County, California. Mr. Leslie W. Symmes is the manager.

COLORADO.

108. Steinel, Alvin T. Telling the professor about the Sweet Ranch; scientific agriculture exemplified at foot of Mt. Sopris. (In Western Farm Life, v. 22, no. 16, Aug. 15, 1920, p. 4)
A letter to the editor telling of Sweet Ranch at Carbondale, Colorado.

CONNECTICUT.

109. Robinson, John H. Had you heard about this big poultry farm? (In Reliable Poultry Journal v. 34, no. 1, March 1927, p. 86) 47.8R27
A description of Branford Farms the "largest market egg plant in New England states," near Groton, Connecticut. It is managed by J. K. Shaughnessy.

FLORIDA.

110. Edmonds, Richard Woods. Unique farm development of 120,000 acres in Florida; J. C. Penney-Gwinn corporation farms - an experiment that may reveal solutions of many of our agricultural problems. (In Manufacturers record, v. 91, no. 21, May 26, 1927, p. 75-76)
The J. C. Penney-Gwinn Corporation Farms is a tract of over 120,000 acres 36 miles southwest of Jacksonville, Florida. It is a cooperative colony made of farms of about 20 acres. The farmers are carefully selected and their work is supervised by Mr. Francis Clarke, manager of farm work.
- 110a. J. C. Penney-Gwinn corporation farms. Penney Farms, Clay County, Florida; a unique agricultural demonstration. [St. Augustine, Florida, Printed by the Record co., 1927] 63 p. Assoc. file.
This illustrated pamphlet describes the location, organization and plan of operation of the J. C. Penney-Gwinn Corporation Farms at Green Cove Springs, Clay County, Florida.
111. Snowhook, John C. How one man, J. C. Penney, is solving the farm problems for hundreds (In Manufacturers record v. 91, Feb. 10, 1927, p. 61-62)
A brief description of the J. C. Penney-Gwinn Corporation at Green Cove Spring, Florida.
112. Tapper, Thomas. Successful store-chain system is applied to a farming project. (In Manufacturers Record, v. 89, no. 11, March 18, 1926, p. 75-76)
A description of the J. C. Penney Company in Clay County, Florida.

ILLINOIS.

113. Bowers, Elmer F. One big landlord and his tenants; they get along famously together, if the tenants live up to the rules. (In Farm Life, v. 39, no. 1, Jan. 1920, p. 10, 59) 6 F2238
Description of the Sibley estate in Ford Co., Illinois, a 13,620 acre farm tract divided into 69 farms which are operated by tenants on shares under the manager, C. G. Rohrer. Corn is the principal crop.

114. Brosemer, Lao J. 4,000 acres without a farm hand. (In Dairy Farmer, v. 17, no. 18, Sept. 15, 1919, p. 878, 899-900) 44.8 K56
An account of Governor Lowden's dairy farms, Sinnissippi Farms in Ogle County, Ill., and of Woodlawn Farms at Sterling, Ill., owned by J. T. Williams who has worked out the system of tenant partnerships on both of these farms.
115. Curtis, Grant M. One of America's greatest poultry breeding plants (In Reliable Poultry Journal, v. 31, no. 9, Nov. 1924, p. 865-871) 47.8 R27
A description of the Great Eight "8" Poultry Farm at Carlyle, Illinois.
116. Dacy, George H. A model live stock farm. (In Iowa Homestead, v. 58, no. 9, Feb. 27, 1913, p. 451, 488) 6 H755
A description of the Gregory farm in Illinois, a prairie farm of 1280 acres built up by Mr. W. S. Corsa, a breeder of Percherons and Berkshires.
118. Dowell, James M. Group management of Corn Belt farms. (In Agricultural Engineering, v. 10, no. 1, Jan. 1929, p. 21-23)
Paper presented at a meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, December, 1928.
The author, who is general manager of the Do-Well Agricultural Service, Champaign, Illinois, points out numerous ways in which the manager can assist the owner or operator of the farm. He writes "Group management brings together a number of farms under one head, but each farm is run as a separate and independent unit. We believe, however, that larger farm units are advisable, quarter sections in place of eighties, and half sections instead of quarters. A convenient Midwest size is 240 to 300 acres, easy to rent and convenient from many angles. Improvement, investment and upkeep per acre is less than on smaller farms."
119. Harper, J. D. The department idea in farming. (In Ohio Farmer, v. 132, no. 12, Sept. 20, 1913, p. 237-238) 6 Oh3
A description of the 25,000 acre farm owned by the Funk Brothers, McLean County, Illinois. Corn is the principal crop but there are also dairy and poultry farms included in the organization.
120. Johnson, J. E. Bank supervision of farms. (In United States Banker, v. 2, no. 4, Jan. 1929, p. 4-5, 35-36, 46-47)
This is a statement about the Agricultural Service Department of the Citizens State Bank of Champaign, Illinois. Mr. Johnson is manager of the department.
121. Keepers, Floyd. Supervised tenancy - new idea in farming. (In Prairie Farmer, v. 101, no. 3, Jan. 19, 1929, p. 75, 102)
A description of two groups of farms in Champaign County, Illinois, one managed by J. M. Dowell, the other managed by J. E. Johnson

122. Keepers, Floyd. Supervised tenancy in operation; it works well on both livestock and grain farms. (In *Prairie Farmer*, v. 101, no. 5, Feb. 2, 1929, p. 149, 180)
A continuation of his article in the *Prairie Farmer*, Jan. 19, 1929.
The author says that Mr. Johnson's system has been called "a chain store plan of management. It is just the opposite. Each farm retains its individuality, but as such is expertly handled."
123. Millar, John H. After all isn't farming a business? (In *Magazine of Business*, v. 54, no. 5, Nov. 1928, p. 520-522, 580-586)
Tells of the 32 farms in Champaign Co. totaling 7,500 acres operated by the Farm Management Department of the Citizens State Bank of Champaign, Illinois. Mr. Joseph E. Johnson is in charge.
124. Platt, Frank L. Big breeding establishment in the Central states (In *American Poultry Journal* v. 57 no. 8, Aug. 1926, p. 719) 47.8 Am32
A description of the Great Eight Poultry Farm at Carlyle, Illinois.
125. Robinson, John H. South's greatest poultry breeding plant. (In *Reliable Poultry Journal*, v. 32, no. 10, Dec. 1925, p. 746-747, 750-751) 47.8 R27
Describes the Great Eight "8" Poultry farm, Carlyle, Illinois.
126. Slawson, H. H. Industrializing agriculture in the Corn Belt. (In *Bureau Farmer*, v. 4, no. 7, March 1929, p. 11-12, 32-35)
An article citing the management of 32 farms in Illinois by J. E. Johnson of the Citizens State Bank of Champaign, as an argument for the industrialization of the farm.
127. Steen, Herman. Supervised tenant farming in Illinois; an interesting development that has increased profits on many farms. (In *Montana Farmer*, v. 17, no. 4, Oct. 15, 1929, p. 3, 17)
Mr. Steen writes "This system of management farming [supervised tenancy] began a few years ago in Illinois as an experiment, to see whether it would not be possible to apply the most advanced farm management methods to family-size farms that are owned individually. So successful has it been in increased monetary returns, in building up the land, and in giving a square deal to those who do the work, that it is being extended rapidly. Nowadays, there is little talk about corporation farming in central Illinois, although that region is perhaps as well adapted for that purpose as any part of the United States."
128. Stewart, Robert. Helping the farmer merge: the movement toward farm mergers and what the banks are doing to aid it. (In *Bankers Magazine*, v. 119, no. 4, Oct. 1929, p. 517-523)
A brief description is given of the farm management departments of a bank in Champaign, Illinois, with J. E. Johnson as manager, The Citizens National Bank of Decatur, Illinois, with T. W. McLaughlin as manager, and First State Trust and Savings Bank of Springfield, Illinois, with Frank H. McKelvey as manager.

129. Stewart, Robert. Mass production methods make farming pay. (In Forbes, v. 20, no. 10, Nov. 15, 1927, p. 18-21, 44) L. C.
Describes the work done by Arthur J. Mason, an engineer on a farm near Chicago, where 2,500 tons of alfalfa hay are harvested annually.
130. Stewart, Robert. When a bank turns farmer. (In American bankers association Journal, Feb. 1929, p. 726-727, 816)
T. W. McLaughlin is in charge of the Farm Management Department of the Citizens National Bank of Decatur, Illinois. He has 10,000 acres under his management, farmed by twenty-eight different tenants. Some of the tenants operate on a grain share lease, others on a fifty-fifty livestock lease. The author concludes: "The type of supervised farming so successfully carried on by the Citizens National Bank of Decatur under McLaughlin's direction has come to stay. The farm is a factory and no factory can succeed without proper supervision. Farming is a business and no business can succeed without a good manager. The average farm in the corn belt probably represents an investment of from \$50,000 to \$60,000. The owners of such farms can well pay a small fee for skilled supervision by a competent farm manager."
"The success of the supervised groups of farms which has been achieved by Mr. McLaughlin and others of the new school leads one to question President-elect Hoover's statement that: 'Farming is and must continue to be an individualistic business of small units and independent ownership.'
"Farming is more than a mere state of living: It is a business proposition and if success is expected in this business it must make use of those factors which have made for success in all other lines of industry."
131. Whitson, Jay. The farm manager gets his chance. Trained supervision of rented farms makes good where corporation farming fails. (In Tallaces' Farmer, v. 54, no. 32, Aug. 9, 1929, p. 1089, 1104-1105)
This article is based on a visit to Illinois farms operated under the supervision of farm managers.
132. Wiggins, E. R. Growing 1000 acres of corn on Hawthorn farm. (In American society of agricultural engineers, Transactions, v. 18, 1924, p. 118-128) 290.9 Am 32
Also in Power Farming, Aug, 1924, p. 5-7.
Paper presented at the 18th annual meeting of the American Society of Agricultural Engineers at Lincoln, Neb., June, 1924.
On this 4200-acre farm near Libertyville, Lake County, Illinois, owned by Samuel Insull, there are 1000 acres of corn raised each year. This paper describes the general farm organization and gives details of labor and machinery costs in raising the corn.

INDIANA.

133. East, Lewis F. Tendencies point to larger farming units. (In Indiana Farmer's Guide, v. 85, no. 26, June 29, 1929, p. 768, 781)

There are two systems of large scale farming in operation in Indiana; the system where a group of farms is placed under a manager who supervises the hired labor on the farms; and the system where share tenants on several farms are supervised by a manager. There are many variations of this latter system. The writer predicts that in the future the profitable farm will consist of 350 to 500 acres operated by two men.

Iowa

132. Harrison, G. R. Farm partnership that pays two men. (In Successful Farming, v. 25, no. 1, Jan. 1927, p. 14, 94) 6 Sul2

The story of a successful 160 acre farm in Iowa, operated by Herman Doscher and Earl Handy.

- 134a. Holmes, C. L. The associated management of farms. (In Iowa bankers association. Proc., 40th, 1926, p. 93-104)

Dr. Holmes proposes three systems of associated management to relieve the farm situation in Iowa: the fee system of which the Do-Well Agricultural Service is a good example; the farm management association, probably incorporated, which would hire a farm manager; and, the rental and sales system of which the Fairway Farms Corporation of Montana is an outstanding example. The last of the three, Dr. Holmes considers "more significant and far-reaching than either of the others."

135. Hunt, Walter J. Business rules this partnership. (In Successful Farming v. 24, no. 9, Sept. 1926, p. 11, 51) 6 Sul2

Fred, Oscar and Erick Anderson operate two farms of 960 acres in Butler County, Iowa. The farms are owned by E. Tyden, an Illinois manufacturer and the partnership is known as Tyden and Anderson Brothers.

Kansas

136. Macdonald, A. B. Sugar on the Kansas plains. (In Country Gentleman, v. 85, no. 4, Jan. 24, 1920, p. 10-11, 56)

An account of a farm of 40,000 acres owned by the Garden City Sugar and Land Co., Garden City, Kansas. 10,000 acres are in sugar beets. J. Stewart is general manager of the whole tract.

137. Yarnell, Ray. Operating a five-hundred acre orchard. (In American Fruit Grower, v. 41, no. 9, Sept. 1921, p. 3, 14-15)

This is the Yaggy plantation near Hutchinson, Kansas, owned and operated by E. E. Yaggy. About 100,000 bushels of apples are produced annually.

Louisiana

138. Barrow, D. N. Lonewa - a thousand acres of prosperity. (In Progressive Farmer, Mississippi Valley, ed., v. 35, no. 50, Dec. 11, 1920, p. 1962-196)

A description of a diversified farm of 1000 acres in Louisiana owned and operated by Mr. Charlie Phillips.

139. Crowther, Samuel. Big business in cotton. (In Country Gentleman, v. 92, no. 3, March 1927, p. 65-66)

The Delta and Pine Land Company was organized by L. K. Salsbury who interested the Fine Cotton Spinners and Doublers Association at Manchester, England, in joining with him in buying land in the Mississippi Delta for a great cotton plantation. Mr. J. W. Fox is the general manager of the plantation which is operated by

tenants working on a share basis on small units. In conclusion, the author writes, "In effect the company is only a very large, centrally controlled cooperative, in which, instead of the members owning their own lands, tools and fixtures, these are owned by the cooperative. But instead of keeping only to marketing, it covers the whole field. It has the advantages of collective buying, collective utilization of science and research, and of collective marketing - the whole being controlled by collective accounting."

- 139a. Dacy, George H. Largest plantation; all cotton and twenty miles long. (In Farm Engineering, v. 5, no. 11, Nov. 1917, p. 9) 58.8 F224

Fox plantation in the Mississippi Delta covers forty acres divided into seventeen units each under a foreman who supervises the negro tenants.

MASSACHUSETTS.

140. Curtis, Grant M. Largest s. c. white leghorn plant in the entire East. (In Reliable Poultry Journal, v. 28, no. 1, March 1921, p. 8, 9) 47.8 R27

A description of Jas. H. Lord's poultry farms at Methuen, Massachusetts.

MICHIGAN.

141. Andrews, Walter E. The largest mint farm in the world. (In World To-day, v. 5, no. 1, July, 1903, p. 917-920)

The Hon. Albert M. Todd of Michigan "owns and operates 10,640 acres devoted to the production and utilization of peppermint and its by product." Mint is raised on two farms under one management, Campania Farm and Mentha Farm. On a third farm cattle are raised to consume the mint hay.

142. McBride, James N. Corporation farming; it produces food and provides safe investment for surplus capital. (In Michigan Farmer, v. 151, no. 15, Oct. 12, 1918, p. 323.) 6 N58

A brief account of the Cleveland Community Farm Company near Alger in Arenac County, Michigan, which carries on diversified farming under central management.

MINNESOTA.

143. Curtis, Grant M. Biggest thing of the kind in history of the poultry industry. (In Reliable Poultry Journal, v. 26, no. 7, Sept. 1919, p. 615-621) 47.8 R27

This is a report made by the editor of the Reliable Poultry Journal on the Annual Poultry Exhibit held by Oak Dale Farms, Inc., on its extensive white leghorn poultry farm near Le Roy, Minnesota.

MISSISSIPPI.

144. Goodman, W. H. Glenwild plantation; the South's greatest stock farm. (In Farming, v. 20, no. 8, Sept. 1922, p. 249-254).
This plantation is near Grenada, Mississippi, and is owned by Mr. John Boden. The farm is operated by twenty-seven negro tenants and one white tenant, all as share croppers under central management.
145. Moss, B. L. Big-scale farming by business methods (In Progressive Farmer, Mississippi Valley ed., v. 35, no. 49, Dec. 4, 1920, p. 1908)
The Luce farm near Lucedale, Mississippi, is a successful truck farm with about 900 acres in cultivation.

MISSOURI.

- 145a Doane, D. Howard. Farm management, a job for the farm land dealer. (In National association of real estate boards. Annals of real estate practice, 1928, p. 532-542)
Describes the work done by the Doane Agricultural Service.

MONTANA.

146. Campbell, Thomas D. Manufacturing wheat on a 95,000 acre farm factory. (In Agricultural Engineering v. 8, no. 10, Oct. 1927, p. 265-268)
58.8 Agr83
An address before a meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, Dec. 1926.
Mr. Campbell tells of practices on his wheat farms at Hardin, Montana. He writes in part as follows: "Now I am not advocating that every farmer should be a large scale farmer, but all farming should be industrialized. I know we will always have the small farmer, and I hope we always do...
"To maintain there are but two kinds of farming left under present economic conditions. There is the small farmer, where the man and his family do all the work; and there is the large farm, operated by engineers on an industrial basis, with high-priced management, highly skilled labor, and large machines, so the output per man will be increased."
147. Campbell, Thomas D. Ten years' experience in manufacturing wheat on 100,000 acres. (In Agricultural Engineering, v. 10, no. 1, January, 1929, p. 18-20)
Paper presented before a meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, December, 1928.
The author who is President of the Campbell Farming Corporation at Hardin, Montana, after pointing out the need for improved agricultural machinery writes: "It is hard to investigate agriculture without becoming too enthusiastic as to the possibilities that are present for the engineer. I know that there is no opportunity in

all creation today equal to the opportunity which the agricultural engineer has before him. I have stated many times that there is no industrial opportunity in the United States equal to the opportunity in industrial farming. There is no capital investment which you can make today which will yield as big a return over a period of ten years as industrial farming. I mean conservative business; I am not talking about novelties and patents and businesses which have a high rate of income for a short time."

Mr. Campbell refers to a curve showing the relation between rainfall and the size of the farm unit.

148. Cutting, Malcolm C. Big doings in Montana. (In Country Gentleman, v. 94, no. 5, May 1929, p.22-23, 130-131) 6 C833

A description of the various farms in the Fairway Farms Corporation in Montana.

149. Cutting, Malcolm C. Manufacturer of wheat. (In Country Gentleman, v. 91, no. 8, Aug. 1926, p. 18-19, 44) 6 C833

Tom Campbell's 95,000 acre wheat farm near Hardin, Montana, is run like a modern factory, utilizing skilled labor and big machines to cut the cost of production.

150. Fennelly, John F. The fallacy of diversification. (In Commerce and Finance, v. 14, no. 50, Dec. 16, 1925, p. 2429-2430)

Favors industrialization of agriculture citing Tom Campbell's 90,000 acre wheat ranch at Hardin, Montana, as an example of successful large scale farming.

151. Moulton, Robert H. Is this the biggest farm in the world? (In Scientific American, v. 121, Aug. 23, 1919, p. 183)

A brief description of Thomas D. Campbell's farms near Hardin, Montana.

152. Rose, Philip S. The biggest wheat farm in the world. (In Country Gentleman, v. 83, no. 43, Oct. 26, 1918, p. 6-7, 36.)

200,000 acres of land located in the Crow, Blackfeet and Fort Peck Indian reservations in Montana and the Wind River reservation in Wyoming. This promises to be the greatest power farming enterprise in the world under private management. The company holds a contract with the government. Thomas D. Campbell is the manager.

153. Stewart, Robert. Mass production on the farm; how the Campbell corporation does it. (In New Republic, v. 59, no. 763, July 17, 1929, p. 230-232)

Describes the Campbell Farming Corporation as a successful type of large scale corporation farming and the management of 32 farms in Illinois by J. J. Johnson, who is in the employ of a bank in Champaign, Illinois, as a successful system of chain farms.

154. Terrell, John Upton. World's largest wheat farm (In Field Illustrated v. 34, no. 5, May 1924, p. 28-29) 42.8 Sp6

A brief account of Thomas D. Campbell's farm at Hardin, Montana.

155. Wilson, M. L. The Fairway farms project. (In Journal of Land and Public Utility Economics v. 2, no. 2, April 1926, p. 156-171)

"In the spring of 1924 the Fairway Farms Corporation of Montana was organized for the purpose of carrying out the first of what, it is hoped, may prove to be a series of experiments to find and demonstrate better practices in adjusting the relations of farmers to the land ... wheat is the main cash crop on the majority of the corporation's farms."

The project is the development of a plan originating with Dr. H. C. Taylor. It is financed by John D. Rockefeller, Jr.

The author summarizes the accomplishments of the undertakings as follows: "Up to the present time the Fairway Farms Project has definitely accomplished three things: (1) the organization of a going concern for the purpose of securing farms and reselling them to capable tenants under the Fairway plan; (2) development of the Fairway tenant-purchase contract; and (3) the selection, organization, and equipment of eight farms. These accomplishments have been made possible despite unfavorable natural conditions, by the application of Fairway principles, including expert advice and supervision in certain phases of farm management."

156. Wilson, M. L. Research studies in the economics of large scale farming in Montana. (In Agricultural Engineering, v. 10, no. 1, Jan. 1929, p. 3-12)

Paper presented at the meeting of the Power and Machinery Division of the American Society of Agricultural Engineers, at Chicago, December, 1928. The author outlines the scope of this paper as follows: "This paper is limited to two fundamental aspects of large-scale farming: First, is large-scale industrial or factory capitalistic farming from an economic standpoint more efficient than family or mode-of-life farming, and, if so, what are the reasons? How can new large-scale farm organizations be organized out of existing farms? This point of view involves new goals and objectives in agriculture. If these goals are economically and socially desirable, then the practical side of the question is how to reach this distant goal. Second, the other question has to do with adjusting and adapting present farm organizations of family capitalistic farms such as they are so as to make the most economical and efficient use of new equipment in the way of power units, tractor equipment, etc. This is the evolutionary point of view and assumes that we start with farms as they are making successive reorganization changes, thereby adapting them more closely with changes brought about by agricultural engineering in the field of design and operation of farm equipment."

The large-scale farms cited as illustrations include: The Fairway Farms Corporation; The Campbell Farming Corporation, near Hardin; The Schnitzler Farm at Homestead; The O'Day Farm at Fife; and Three Forks Land Company at Three Forks. All of these farms are in Montana.

NEW JERSEY.

157. Dean, William Harper. Keeping the profits at home. Three brothers

combine in growing, storing, and marketing. (In Country Gentleman, v. 78; no. 21, May 24, 1913, p. 807-808, 840) 6 C833

Albert Repp operates an 800 acre farm between Pitman and Glassboro in Gloucester County, New Jersey and has 450 acres in apples, peaches and pears. His brother, Charles Repp, operates a cold-storage plant in Glassboro where the fruit is stored and another brother, Joseph Repp, is a commission merchant in Philadelphia.

158. Gapen, Charles E. New farms from old. What two brothers did with nine run down farms. (In Country Gentleman, v. 78, no. 19, May 10, 1913, p. 740-741, 765) 6 C833

Walter and Willard Minch manage nine farms, totaling 672 acres, in Cumberland County, New Jersey. These include Longlook, a potato farm; Minchberry, where strawberries are raised; Cubly Hollow and Buttonwood, which are truck farms; and Twin Pine farm, where alfalfa is the principal crop. The main office for these farms is in Bridgeton. The farms are operated by hired labor with a hired boss on each farm. A brief statement of accounts is given showing the profits from strawberries and potatoes.

159. McMahon, John R. Best farmer in New Jersey; Minch brothers use 1200 acres in fifteen farms. (In Country Gentleman, v. 83, no. 37, Sept. 14, 1918, p. 10-11, 32) 6 C833

Walter L. and L. Willard Minch own and manage 1500 acres of farm land near Bridgeton, New Jersey. There are 15 separate farms with a foreman on each. Various crops are raised.

160. Minch, Willard L. Some principles of extensive farming that have stood the crucial tests of successful experience. (In American farm management association. Record of the proceedings. 8th Annual meeting, 1917; p. 58-66)

In this talk, based on the experience of the speaker on the Minch Brothers' farms in New Jersey Mr. Minch stated that "An extensive plan of farming will secure attention for a number of details that might otherwise escape the attention of farmers who, operating on a limited scale, might pass them by."

161. Williams, D. H. Before and after alfalfa. (In Country Gentleman, v. 82, no. 39, Sept. 29, 1917, p. 3, 36)

Walker-Gordon Dairy Farm at Plainsboro, New Jersey, includes 2200 acres and 500 head of dairy cows. Nearly 600 acres are in alfalfa. H. W. Jeffers is manager.

NEW MEXICO.

162. Walker, A. L., and Lantow, J. L. A preliminary study of 127 New Mexico ranches in 1925. State College, N. M., 1927. 107p. (New Mex. Agr. exp. sta. Bul. 159)

Bibliography: p. 107. Brief mention is made on p. 18 of the large scale cattle corporations which flourished in New Mexico about 1880.

NEW YORK.

163. Colton, John R. How Wall Street tills the soil. (In Scientific American Supplement, v. 82, Aug. 19, 1916, p. 120-121)
Putting the Farm on a Manufacturing Basis is the sub-title of this account of the Oak Orchard Farm in Genesee Co., N. Y., which is as large as the Island of Manhattan, and where corporation methods of handling both men and machinery are being applied.
164. Lee, Leon F. Makes a success with 2,500 layers (In Hoard's Dairyman, v. 73, no. 2, Jan. 25, 1928, p. 90) 44.8 H65
A description of the Oaks Poultry Farm of New York where Nathan Oaks, jr., has a flock of 2,500 white leghorn hens.

NORTH CAROLINA.

165. U. S. Congress. Senate. Committee on irrigation and reclamation.
Creation of organized rural communities to demonstrate methods of reclamation and benefits of planned rural development.
Hearing... 70th Congress, 1st sess. on S2015... January 27, 1928.
Washington, U. S. Govt. print off., 1928. 46p. 282.2 Un 32, 1928.
Contains a brief statement by Hugh MacRae about the Castle Haynes colony in North Carolina.

NORTH DAKOTA.

166. Reinoehl, Frank W. Group farm management urged to train tenant for successful land ownership. (In St. Paul Pioneer Press, Sunday edition, Dec. 1, 1929, section 4, p. 1; probably also in the Fargo local papers.)
This was an address (listed in the Program under the title Review of Method of Farm Supervision) before the second annual Land Owners' Conference at Fargo, North Dakota, November 7 and 8, 1929, under the auspices of the Greater North Dakota Association.
Mr. Reinoehl, who is manager of Elk Valley Farms at Larimore, North Dakota states that "Here and there it has been shown that under a proper system of tenantry, where farmers are given a square deal and operate under the right kind of farm management, they may be far more successful and happy, rear their families with greater comforts and conveniences, educate their children to greater advantage than on a farm of their own, struggling under a heavy burden of debt that handicaps them in every effort to farm properly, and grinds out of life all that is worth while."
He also points out that supervised management, either by a manager employed by the company or by an agricultural service agency is also to the advantage of the investment company.

167. United States. Dept. of Agriculture. Baumgartel, W. H. Centralized management of a large corporate estate operated by tenants in the wheat belt. Washington, D. C., 1925. 34p. (U. S. Dept. Agr. Circ. 351)

This Circular describes the development and system of management of the Amenias and Sharon Land Company, a large corporate estate located in the Lake Agassiz basin, now the Red River Valley, in eastern North Dakota.

In the introduction, the author writes "In certain respects this estate is unique and therefore justifies special consideration. It developed the policy of working the land by tenants at a time when land in that section of the country was cheap and easily acquired, and consequently when tenant farming was not prevalent. The large 'bonanza' farms operated by hired labor, which so largely prevailed in the Red River Valley, have tended to be displaced by smaller farms; but the Amenias and Sharon estate has continued with little essential change either in size or in policy. For the most part the system of management has been successful and has proved satisfactory to the tenants as well as to the owners. The detailed policies employed have been worked out gradually as a result of experience through several decades."

OHIO.

168. Black, Bernard. Factory system of farming. The "big farm" not a success. (In Rural New Yorker, v. 76, no. 4462, Dec. 29, 1917, p. 1461)

From his experience on a farm in Ohio the writer thinks the factory system on the farm is not economical.

169. Minneman, Paul G., and Falconer, J. I. Large land holdings and their operation in twelve Ohio counties. Columbus, Ohio, 1929, 31p. (Ohio. State university. Dept of rural economics, and Ohio, Agr. exp. sta. Mimeograph bul. no. 17) 281.9 Oh32

This report is summarized as follows: "This study includes all over-500-acre land holdings in 12 representative Ohio counties. The 123 holdings comprised a total of 127,262 acres of land. About 60 per cent of the holdings are owned by farmers, one-third of the land being inherited and two-thirds purchased by the present owners. Generally the ownership of such holdings appears to go thru a typical cycle as follows: One owner, an estate, several related owners, several non-related owners and then perhaps into the hands of financial institutions such as banks and loan companies. Corporations other than banks owned only five per cent of the holdings.

"With the exception of financial institutions which have acquired land thru foreclosure of farm loans there is little indication that Ohio large land holdings are increasing in size or in number. Holdings of foreclosed lands have, however, increased during recent years.

"Forty-six per cent of the land was operated by hired labor, 52 per cent by tenants, and two per cent was idle. Numerous characteristics of the ownership and of the holding such as the owner's experience, his time available, his distance from the holdings, permanency of the ownership, amount of working capital available, size of holding, number of units, scatteredness of the land, distribution of the buildings, labor supply, market conditions, transportation facilities, soil, and topography, all affect the choice of methods of operation. The relative advantage of the various methods of operation depends largely upon the relation between the prices of the several input and output elements at any given time and place.

"There has recently been an increasing interest in the problems of tenant supervision and in the relative advantages of the various types of tenancy.

"Generally the trend in operation of these large land holdings since before the World War has been toward more tenancy. During the period of high war prices the trend was reversed toward hired labor operation but since then the trend toward tenancy has again resumed with renewed impetus."

An appendix on page 31 contains a brief statement on life insurance company holdings in Ohio.

OKLAHOMA.

170. Callen, Charles Lane. The story of the great 101 ranch. (In American Magazine, v. 106, no. 1, July, 1928, p. 54-55, 147-151)

A summary of the article is given in The Literary Digest for August 4, 1928, p. 37, 38, 40 with title: A Big American Farm and its Circus Sideline.

This ranch owned by the Miller brothers consists of 110,000 acres near Ponca City, Oklahoma. They raise cattle and hogs and have a large apple orchard. As a side-line they conduct round-ups at fairs and conventions.

171. Dacy, George H. La Hacienda agropecuaria más grande del mundo. (In La Hacienda v. 21, no. 10, Oct. 1926, p. 291-294)

A description of the large stock farm operated in Oklahoma by three brothers, Joseph, Zack, and George Miller. They have also organized a circus.

172. Hoke, Charles E. Nothing to \$300,000, the story of a big farm with a system behind it. (In Country Gentleman, v. 79, no. 5, p. 212-215, Jan. 31, 1914.) 6 C833.

Bill Vancelous has 7000 acres under his direction. He owns 2000 acres and leases the rest from the Indians in Oklahoma near Ponca. He produces livestock and feed crops.

173. Roberts, Clarence. Will managers supervise our rented farms?
Already one group of Oklahoma farms is being handled in this way.
(In Oklahoma Farmer-Stockman, v. 41, Nov. 15, 1928, p. 819,
842-843)

"In Okmulgee County, Eastern Oklahoma, W. W. Morton put a group of 50-odd farms under the supervision of F. S. Hathaway ... As a part of the farm enterprise Hathaway and Morton, under a partnership, produce purebred cottonseed on these farms. Renters agree to buy and use seed only from the partnership farms... In addition purebred Duroc-Jersey hogs are raised on a farm run with hired labor, and to these hogs the rent grain is fed." Some of the farms are run by tenants and others by croppers. The manager considers the croppers more successful as they are under supervision and have better equipment since it is supplied by the management.

OREGON.

174. Lewis, C. I. Only four thousand acres of apples. (In American Fruit Grower, v. 40, no. 9, Sept. 1920, p. 6-7) 80 G85.
Tells of the success of Mr. A. C. Churchill as president and general manager of the Dufur Orchard Company near The Dalles, Oregon.

TEXAS.

175. Currie, Barton W. 100,000 acres of business farming. (In Country Gentleman, v. 80, no. 24-25, June 12, 1915, p. 1010-1011, 1042-1043)
Describes the Coleman-Fulton Pasture Company, in Texas, commonly known as Taft Ranch, which owns and operates this corporation ranch which has a value of approximately \$2,000,000. Charles P. Taft is president of the company. Joseph H. Green is vice-president and general manager. Prof. Charles H. Alvord is head of the farm department which manages 37 tenant farms.
176. Currie, Barton W. Rice - from prairie to market. (In Country Gentleman, v. 80, no. 33, August 14, 1915, p. 1294-1295)
The San Jacinto Rice Company of which Mr. W. B. Dunlap is president and Dr. George W. Collier is vice president and the Old River Rice Company of which Dr. Collier is president and Mr. Dunlap vice president, produce rice on 30,000 acres near Houston, Texas. The farms are broken up into tracts which are operated on a share-tenant basis under the supervision of the Company.
177. Davis, K. C. The next great American industry. (In Outlook v. 149, no. 15, August 8, 1928, p. 580, 586) Pam. Coll.
Describes the 18,000 acre cotton ranch of John O. Chapman near Corpus Christi, Texas. 124 white tenants operate farms of 160 acres each under the management of Mr. Chapman.

178. Gabbard, L. P. El cultivo del algodón en grande escala en el estado de Tejas. (In La Hacienda, v. 24, no. 3, Mar. 1929. p. 94-97)

A study of the effect of machinery on the production of cotton on a large scale in the regions of Corpus Christi and San Angelo, Texas.

179. Gabbard, L. P. Effect of large-scale production on cotton growing in Texas; with discussion. (In Journal of Farm Economics, v. 10, no. 2, April 1928, p. 211-224)

This paper was read at the 18th annual meeting of the American Farm Economic Association at Washington, D. C., December, 1927.

In conclusion, the speaker said, "it may be predicted with much safety that these new developments will result in, (1) a further shifting of the center of cotton production westward, (2) a steady settlement of new farm lands, (3) a probable increase in land values, (4) a tendency toward specialization, (5) reduced cost of production, (6) an increase in the size of farms, and (7) an increase in the amount of land that can be handled by the individual farm operator - hence an increased production and net income per man."

Mr. J. D. Pope, in concluding his discussion of Professor Gabbard's paper said, "The only economic effects which large scale methods of cotton production are exercising at present are on the few who use such methods. If such methods should in the future be used to an important extent they will affect small scale growers only if they lower the price of cotton. Such methods per se cannot lower the price of cotton unless over a long period they cause the supply of cotton to increase more rapidly than the demand. The existence in parts of the Southwest of enterprises alternative with cotton and the steady growth in world consumption of cotton may prevent large scale methods from making cheaper cotton. The small southeastern cotton growers are improving their efficiency and can do so still further in non-spectacular ways."

180. Gabbard, L. P., and Jones, F. R. Large-scale cotton production in Texas. 1927. 24p. (Texas. Agr. exp. sta. Bul. 362)

Prepared in cooperation with the Bureau of Agricultural Economics and the Bureau of Public Roads, U. S. Dept. of Agriculture.

The scope of this bulletin is outlined by the authors as follows:

"This Bulletin reports the results of a survey made in the Corpus Christi and the San Angelo areas of Texas. In a general way it shows the effects of large-scale methods on the utilization of land, labor, and power. Specifically, it seeks: (1) to describe the common practices and show the accomplishments in the principal operations involved in large-scale cotton production. (2) to compare the use of animal and tractor power, (3) to point out the influence of these methods on the cost of cotton production, (4) to state the conditions under which such methods are practical, and (5) to indicate those areas in the State to which such methods are most applicable."

181. Platt, Frank L. Biggest poultry farm in the world. (In American Poultry Journal v. 58, no. 1; Jan. 1927; p.11, '88-92, 94-97)
This article tells how M. Johnson built up his big poultry ranch near Bowie, Texas. This white leghorn ranch is described as follows: "120,000 eggs in incubators, 75,000 growing chickens. Shipping 28,000 day-old chicks per week, 1,000,000 square feet of floor space in the buildings." From 12 to 20 men are employed on the ranch.
182. Price, Theodore H. A 100,000-acre business. (In World's Work, v.25, Jan. 1913, p. 271-275)
Described the Taft Ranch in Texas, formerly known as the Coleman-Fulton Pasture Company. There are four villages on the ranch. There is a director for each department of the business, i.e., cotton, cattle, hogs, machinery, etc., and subordinate managers who have immediate supervision of the work.
183. Stratton, George Frederic. Mr. Taft's tenants; how they earn farms on his big Texas ranch. (In Country Gentleman, v. 84, no. 9, March 1, 1919, p. 5, 37)
Joseph F. Green is manager of this Texas ranch which is operated by tenants.

WASHINGTON.

184. Stratton, G. F. Apple engineer of the B. O. ranch. (In Country Gentleman, v. 84, no. 43, Oct. 25, 1919, p. 6-7, 52) 6C833
The Boston-Okanogan Apple Company in Okanogan County, Washington, is financed by business men in Boston and managed by Mr. S. R. Everett.

WISCONSIN.

185. Perry, Henry A. Chippewa Valley ranch. (In American Sheep Breeder and Wool Grower, v. 39, no. 3, March 1919, p. 166-168) 45.8 Am31
This is a brief account of the Chippewa Valley Sheep Company's ranch near Holcombe, Wisconsin. It contains approximately 1400 acres and is managed by George McKerrow.
186. Sturlaugsen, Jonas. The size of landholdings in Wisconsin (In Journal of Land and Public Utility Economics, v. 3, no. 3, Aug. 1927, p. 308-322)
"This article is based on a study of the size of landholdings in Wisconsin made by the writer a year ago for the Institute for Research in Land Economics and Public Utilities."
In summarizing the results of his study he writes, "Insofar as land in farms is concerned, there is practically no concentration in landownership in Wisconsin. The land in large farms or in other large holdings of farm land is an extremely small portion of the total acreage of farm land in the state. The data show a trend toward greater diffusion in landownership instead of toward greater concentration."

EDITORIALS AND UNSIGNED ARTICLES

187. Agricultural Engineering. Reaction to Mr. Hoover's stand on corporation farming. (In Agricultural Engineering, v. 9, no. 10, Oct. 1928, p. 324-325)
Gives a digest of the comment in the press, particularly the farm press, on Mr. Hoover's statement on corporation farming in his acceptance speech.
188. Agricultural Engineering. Seeking the facts about large-scale farming. (In Agricultural Engineering, v. 10, no. 1, January 1929, p. 38)
A brief editorial on the session of the Power and Machinery Division of the American Society of Agricultural Engineers held in Chicago, Dec. 1928. The papers presented at the meeting are printed in this issue.
189. Agricultural Engineering. Team work for economists and engineers. (In Agricultural Engineering, v. 10, no. 1, January 1929, p. 38)
A brief editorial on the Dec. 1928 meeting of the American Society of Agricultural Engineers.
190. America At Work. Does Agriculture need the labor union or the corporation: can either be sold to the farmer; how the farmer as an individual is fighting an organized society (In America at Work, v. 7, No. 6, Aug. 20, 1923, p. 15, 17, 34, 36)
Agriculture must organize eventually, not only for marketing, but also for production, if it is to compete with other industries.
191. American Agriculturist. Corporation farming would ruin the nation. (In American Agriculturist, v. 119, no. 1, Jan. 1, 1927, p. 4)
After reading an article regarding the wheat growing operations of Thomas D. Campbell of Hardin, Montana, the editor wrote this editorial to the effect that "neither corporate nor cooperative farming is practical on the productive side of farming."
He states that Mr. Campbell leases the land he uses from the Crow Indians, pays no taxes and pays his rent with a percentage of his crop. "What Farmer could not succeed under like conditions."
192. American Review of Reviews. Large land holdings in North Dakota. (In American Review of Reviews, v. 72, no. 4, Oct. 1925, p. 431-432) 110 Am32
An editorial on Mr. Alva H. Benton's article in the Journal of Land and Public Utility Economics.
193. Bradstreet's. Large versus small farming. (In Bradstreet's, v. 57, no. 2666, Aug. 3, 1929, p. 503-504)
An abstract of the report of the Chamber of Commerce of the U. S. on large-scale farming.

194. Breeder's Gazette. Cotton, cattle and hog farming (In Breeder's Gazette, v. 77, no. 19, May 6, 1920, p. 1225) 49 B74
The plantation of McQueen Smith Farming Co., near Prattville, Ala., of 9,500 acres, is operated by negro croppers on 30 to 35 acre units on the share system. William Howard Smith is president and business manager of the company.
195. Breeder's Gazette. Hereford farming in Wyoming. (In Breeder's Gazette v. 78, no. 14, Sept. 30, 1920, p. 629) 49 B74
Brief description of the farm of the Wyoming Hereford Corporation near Cheyenne.
196. Bureau Farmer. Farmers answer Mr. Ridgway. (In Bureau Farmer, v. 4, no. 10, June 1929, p. 9, 35-36)
These answers to Mr. Ridgway's article, in the Bureau Farmer for Feb. 1929, present many points of view.
197. California Citrograph. Cooperative cultural work shows decided advantages. Ninth year of operation of Liberty Groves Corporation of Upland. (In California Citrograph, v. 13, no. 8, June 1928, p. 294)
A brief statement of the purpose and success of the Liberty Groves Operating Corporation of Upland, California. T. R. Woodbridge is president and general manager. The corporation operates over four hundred acres of citrus groves.
198. California Citrograph. Cooperative farming of citrus groves proves successful. (In California Citrograph, v. 14, no. 8, June 1929, p. 325)
A statement showing the 10 year record of the Liberty Groves Operating Corporation of Upland, California. The Corporation operates over 500 acres of citrus groves.
199. Commercial West. Corporation farming on big scale gets under way in South Dakota. (In Commercial West, v. 56, no. 19, November 16, 1929, p. 22)
A corporation has been organized in Vermillion, South Dakota, under the name of Associated Farms, Inc. The company's capital stock is divided into 80,000 shares of the par value of \$25. The company will buy farm land in South Dakota and supervise the management of the farms. "It is more or less the idea of the chain system of merchandising applied to practical farming." Martin L. Thompson is president of the company.
200. Commercial West. A farming analysis. (In Commercial West, v. 56, no. 10, Sept. 14, 1929, p. 6-7)
An editorial based on the report of the Chamber of Commerce and a study of 124 dairy farms in southeastern Minnesota, by W. P. Ranney of the Farm Management Division, University of Minnesota.

201. Commercial West. Highly trained farm management urged at N. D. land conference. (In Commercial West, v. 56, no. 19, November 16, 1929, p. 11)
This is a report of Dr. W. J. Spillman's remarks on group management farms at the joint meeting of the Land Owners Conference and the Fargo Exchange Club held in Fargo under the auspices of the Greater North Dakota Association.
202. Commercial West. Will build up North Dakota farms. (In Commercial West, v. 56, no. 15, Oct. 19, 1929, p. 19)
A brief account of the T. Melvin Lee Company which has recently been organized at Valley City, North Dakota. "While the new enterprise will cover a complete farm management service for large and small farms, farm loans, investments, real estate sales, and all classes of insurance, the dominant feature of the business will be farm management."
203. Co-operative Manager and Farmer. Chain farms. (In v. 18, No. 7, March 1929, p. 20)
A brief editorial stating that if chain farming or large corporation farming becomes a reality it will have "an important effect on the country grain handling business."
204. Cooperative Marketing Journal. Need agriculture worry about corporation farming? (In Cooperative Marketing Journal, v. 3, no. 6, November 1929, p. 157)
A brief editorial quoting opinions favoring and opposing corporation farms.
205. Country Gentleman. The old order changeth. (In Country Gentleman, v. 90, no. 15, Apr. 11, 1925, p. 16)
This editorial says farms are being mechanized, which may lead to corporate management, but that this is not to be feared. "Instead of masses of poor, inefficient peasants, we shall have a relatively small, upstanding, prosperous class of farm owners."
206. Economist (Chicago). Large farm company plans common stock financing. (In Economist, Chicago, v. 82, no. 2, July 13, 1929, p. 93)
A brief note stating that the S. A. Gerard Company which is engaged in the large scale production and marketing of fresh fruits and vegetables in Arizona, California, Colorado and New Mexico has come to Wall Street for a loan.
207. Farm and Fireside. Tests will tell. (In Farm and Fireside, v. 53, no. 6, June, 1929, p. 4)
A brief editorial which states that "the final tests will be whether corporation farming pays, and whether people like it well enough to help make it pay."
208. Farm and Ranch. Big business in farming (In Farm and Ranch, v. 42, no. 47, Nov. 24, 1923, p. 10) 6 F31

An editorial criticism of Mr. Theodore Price's address before Dallas Chamber of Commerce in which he recommended corporation farming.

209. Farm and Ranch. Chain and corporation farming. (In Farm and Ranch, v. 48, no. 14, April 6, 1929, p. 8)
A brief editorial.
210. Farm and Ranch. Editorial. (In Farm and Ranch, v. 47, no. 46, Nov. 17, 1928)
"Farm and Ranch would welcome the coming of capital into the agricultural industry." It has no fear that corporation farming will drive out the efficient small farmer.
211. Farm and Ranch. Toward corporation farming. (In Farm and Ranch, v. 48, no. 14, April 6, 1929, p. 5)
A brief editorial predicting a rapid change from the small individual farm to corporation farming.
212. Farm, Stock & Home. Farm owners and managers form organization. (In Farm, Stock & Home, v. 45, no. 9, May 1, 1929, p. 340)
A brief editorial on the organization of the Southwestern Minnesota Farm Managers' Association. The names of the first officers are given.
213. Farmstead, Stock and Home. Corporation farming (In Farmstead, Stock and Home v. 44, no. 4, Feb. 15, 1928, p. 128) 6 F2282
An editorial stating that the writer thinks that a few years trial will show that corporation farming will not work.
214. Farmer. Another view on corporation farming. (In The Farmer, v. 46, no. 11, March 17, 1928, p. 488) 6 F2211
An editorial quoting Prof. Andrew Boss in opposition to corporation farming.
215. Farmer. Corporation farming (In The Farmer v. 45, no. 17, Apr. 23, 1927, p. 692)
An editorial disagreeing with Roger Babson's statement that corporation farming is one of the coming developments in farming.
216. Farmer. Corporation farming (In The Farmer v. 46, no. 4, Jan. 28, 1928, p. 134)
This editorial, opposing corporation farming, quotes Ex-Gov. Harding of Iowa as favoring it.
217. Grain World. Corporation farming. (In Grain World, v. 101, no. 3, Jan. 30, 1929, p. 8)
A brief editorial favoring corporation farming.

218. Illinois Farmer. It's all in the management. (In Illinois Farmer, v. 77, no. 1, Jan. 1, 1929, p. 5)
A brief editorial referring to the farms operated by Joseph J. Johnson as a practical example of chain farming.
219. Iowa Homestead. Farming to a purpose. A farm on which diversified lines of stock raising are followed in a systematic, scientific and successful manner. (In Iowa Homestead, v. 57, no. 51, Dec. 19, 1912, p. 2299)
A description of a 2,000 acre farm, Mondamin Farm, in Woodbury County, Iowa.
220. Iowa Homestead. Large scale farming. (In Iowa Homestead, v. 74, no. 11, March 14, 1929, p. 484)
An editorial quoting largely from Prof. M. L. Wilson's speech at the meeting of the American Society of Agricultural Engineers in Chicago.
221. Iowa Homestead. What about large scale farming. (In Iowa Homestead, v. 74, no. 3, Jan. 17, 1929, p. 84)
An editorial.
222. Jersey Bulletin. Texas farm nearly size of Delaware. (In Jersey Bulletin, v. 39, no. 43, Oct. 27, 1920, p. 2944-2945)
A brief statement of a ranch of 1,250,000 acres at Kingsville, Texas. The owner is Mrs. Henrietta M. King. It is managed by her son-in-law, Mr. Robert J. Kleberg. Details of management are not given.
223. Literary Digest. Incorporated farms. (In Literary Digest, v. 95, no. 1, Oct. 1, 1927, p. 68-69)
A brief item on the formation of a \$150,000 corporation by three Kansas wheat farmers.
224. Magazine of Business. Peasant or large scale farming. (In Magazine of Business, v. 55, no. 6, June 1929, p. 633-634)
According to this short editorial, two types of farming are predicted in this country "peasant farming on the one hand, and large-scale corporately organized, mechanized farming, on the other." Although this condition is to be regretted it is inevitable owing to the independence of the farmer and his failure to cooperate.
225. Manufacturers Record. \$1,000,000 corporation organized in Florida outlines farm relief plans under which it will operate (In Manufacturers Record, v. 92, no. 22, Dec. 1, 1927, p. 79-80)
297.2 M31
This is a brief account of the South Florida Products Corporation, Fort Pierce, Florida, organized by R. N. Koblebard. The company plans to establish fifty 20-acre farms which will be financed and supervised by the company.

226. Mechanical Engineering. Operating a 95,000-acre wheat farm. Thomas D. Campbell, of Montana, employing engineering methods and ingenious combinations of power-driven machines on a tremendous scale, operates with skilled men on an industrial basis. (In Mechanical Engineering, v. 50, no. 10, Oct. 1928, p. 743-752)
A description of the Campbell Farming Corporation in Montana, illustrated with pictures of harvesting and a sample of the managers daily report.
227. Michigan Farmer. Chain farms. (In Michigan Farmer, v. 172, no. 7, Feb. 16, 1929, p. 228)
A brief editorial in which it is stated that although "most of us do not like the idea of corporation farming... the average farmer has to take off his hat to them when it comes to making money."
228. National Farm News. Numerous chain farming projects were failures. (In National Farm News, v. 4, no. 17, Feb. 9, 1929, p. 2)
A brief mention of the failure of the corporation farm projects in Tompkins County, New York, Tonawanda swamp in Western New York, and Seabrook Farms, incorporated in New Jersey. Vegetables and fruits were the crops raised.
229. National Grange Monthly. Very encouraging. (In National Grange Monthly, v. 26, no. 6, June 1929, p. 10)
The editor is encouraged by the fact that many newspaper writers advise caution in regard to corporation farming.
230. National Stockman and Farmer. Corporate management. (In National Stockman and Farmer, v. 48, no. 39, Nov. 1, 1924, p. 707)
This editorial claims that corporate management is not as successful as individual farming.
231. Nebraska Farmer. A big scale farm in the Panhandle; Linn Brothers operate on factory basis. (In Nebraska Farmer, v. 70, no. 7, Feb. 18, 1928, p. 309)
A brief description of a large wheat farm operated by the Linn Brothers in Kimball County, Nebraska.
232. Nebraska Farmer. Family farms in no danger. (In Nebraska Farmer, v. 71, no. 35, Aug. 31, 1929, p. 1368)
A favorable editorial comment on the report of the Chamber of Commerce of the United States of America on large-scale farming.
233. New England Homestead. Big scale farming. (In New England Homestead, v. 99, no. 10, Sept. 7, 1929, p. 5)
An editorial based on the report of the Chamber of Commerce of the United States of America on large-scale farming.
234. New Republic. Shall we have factory farms? (In New Republic, v. 52, no. 665, Aug. 31, 1927, p. 31-32) L. C.

With the development of machinery, agriculture must necessarily be carried on in larger units. To prevent these units from being mere profit-making factory farms, the writer suggests that social planning "may attempt to create real farm communities, with properly considered agricultural programs with adequate credit, with expert advice, with cooperative buying and selling, with use of commonly owned machinery and the experimental development of a common stock of knowledge, and with an attractive social life."

235. New York Journal of Commerce. A farming corporation. (In New York Journal of Commerce, v. 142, no. 10,951, July 15, 1929, p. 4)
An editorial emphasizing the trend toward large scale farming and suggesting the merger or cooperation for production for the small farmer.
236. New York Journal of Commerce. Large scale farms held no panacea for rural problem. (In New York Journal of Commerce, v. 142, no. 10,963, July 29, 1929, p. 1, 24)
An article reporting the findings of the survey made by the Chamber of Commerce of the United States in which it was found that "The large scale farms in the United States are neither more nor less successful than the small, family size farm."
237. New York Journal of Commerce. Mass production and farming. (In New York Journal of Commerce, v. 141, no. 10,926, June 14, 1929, p. 4)
An editorial, contrasting Mr. Hoover's statement in his address accepting the Presidential nomination, with Prof. Nourse's statement in the Report of the Committee on Recent Economic Changes.
238. New York Times. Annalist. Favors corporate control of farms. (In New York Times, Annalist, v. 10, Aug. 13, 1917, p. 200)
This is a report of an interview with Louis B. Magid, director of the farm and orchard owned by the Appalachian Corporation at Tallulah, Georgia. He favors large scale corporate management of farms.
239. New York Trust Company. Index. Farming by corporations. (In Index, Feb. 1929, p. 24-25, 28-29)
This article points out the difference between the large scale farm owned and operated by the individual and the corporation farm which is as yet "unseasoned" and "uncertain."
240. Orange Judd Farmer. Big meeting in big orchard; Illinois fruit men visit A. L. McClay. (In Orange Judd Farmer, v. 61, Aug. 12, 1916, p. 14)
A brief account of a big apple orchard managed by A. L. McClay.
241. Pennsylvania Farmer. Factory farming (In Pennsylvania Farmer, v. 99, no. 14, Dec. 22, 1928, p. 418)

An editorial referring to factory farming in the Central West as of interest possibly in a competitive way but not as a type of farming suited to conditions in Pennsylvania.

242. Pennsylvania Farmer. In both directions. (In Pennsylvania Farmer, v. 100, no. 9, March 2, 1929, p. 796)
An editorial on the investigation made by Paul G. Minneman and J. I. Falconer and published as Ohio Agricultural Experiment Station. Mimeograph Bul. no. 17.
243. Pennsylvania Farmer. No need to fight. (In Pennsylvania Farmer, v. 100, no. 18, May 4, 1929, p. 1168)
A brief editorial to the effect that the Grange need not fight corporation farming as "human nature may have to change before farming becomes a centralized industry."
244. Reliable Poultry Journal. This country's largest poultry plant is in Texas (In Reliable Poultry Journal, v. 33, no. 12, Feb. 1927, p. 868, 870)
A description of the M. Johnson Poultry Ranch at Bowie, Texas.
245. Southern Agriculturist. Industrialized agriculture (In Southern Agriculturist, v. 57, no. 22, Nov. 15, 1927, p. 3)
The industrialized farm which seems to be coming will have certain advantages provided the bulk of the farms are still privately owned and operated.
246. Southern Planter. Corporation farming in the South (In Southern Planter, v. 90, no. 11, June 1, 1929, p. 10)
"It is the problem of machine farming and not corporation farming that we [the South] need to solve."
247. Southern Ruralist. Example of farm corporation. (In Southern Ruralist, v. 36, no. 11, Sept. 1, 1929, p. 12-13)
A brief editorial criticizing an Eastern daily which praised corporation farming on the basis of the Campbell Farming Corporation, without giving all the facts.
248. Twentieth Century Farmer. A farm of 9,500 acres made from swamp. One of the best examples of modern drainage, diking and farming in the country. (In Twentieth Century Farmer, no. 652, June 7, 1913, p. 6) 6 T91
This farm is located near Saginaw, Michigan.
249. Wallaces' Farmer. Big farming by a young farmer. (In Wallaces' Farmer, v. 43, no. 41, Oct. 11, 1918, p. 1459)
A description of the 400-acre livestock farm operated by Mr. John Lounsberry in Story County, Iowa.
250. Wallaces' Farmer. Corporation farming. (In Wallaces' Farmer, v. 50, no. 14, April 3, 1925, p. 500)

An editorial which quotes the New York Times as approving the spread of corporation farming, especially the activities of Thos. D. Campbell of Montana. The editor fears that corporation farming will cost in terms of human satisfaction more than it is worth in efficiency.

251. Wallaces' Farmer. [Corporation farming in Hawaii] (In Wallaces' Farmer, v. 53, no. 14, Apr. 6, 1923, p. 547)
A brief editorial.
252. Wallaces' Farmer. Family versus the corporation. (In Wallaces' Farmer, v. 53, no. 28, July 13, 1923, p. 1008)
An editorial favoring the family-sized farm.
253. Wallaces' Farmer. Thousand-acre hog farm. (In Wallaces' Farmer, v. 44, no. 37, Sept. 12, 1919, p. 1743)
The Wickfield Farm at Cantril, Iowa is leased and operated by F. F. Silver. A large well-equipped dormitory houses the hired labor.
254. Western Farm Life. The Sweet Ranch. (In Western Farm Life, v. 22, no. 11, June 1, 1920, p. 8)
An editorial on the Sweet Ranch at Carbondale, Colorado. Mr. Lou D. Sweet is head of the corporation and Mr. H. H. Simpson is the manager.
255. Who is Who in the Grain Trade. Brookings plan. (In Who is Who in the Grain Trade, v. 17, no. 22, Sept. 20, 1928, p. 18, 20)
An editorial disagreeing with the Brookings corporate farm plan in which the editor writes: "Any plan is doomed to failure in advance if it contemplates the destruction of the individual farmer and the substitution of great corporations, no matter how efficient they were."
The Brookings plan is included in the same issue, p. 35-37.
256. Who is Who in the Grain Trade. "Industrialized" farming! (In Who is Who in the Grain Trade, v. 17, no. 21, Sept. 5, 1928, p. 19-20)
An editorial disagreeing with Prof. Gillette's prediction of an industrialized agriculture in the United States.
257. World Agriculture. MacRae colonies in North Carolina. (In World Agriculture, v. 1, Jan. 1921, p. 79) 6 W892
This cooperative community near Wilmington, North Carolina, has nearly 5,000 acres under cultivation and supports 3,000 colonists.

FOREIGN COUNTRIES

ARGENTINE REPUBLIC.

258. Nelson, D. My visit to the largest hog ranch in the world. (In Swine World, v. 7, no. 21, May 20, 1920, p. 7)
A brief account of Estancia LaMora in Argentina, where twenty thousand Poland China hogs are raised by the Campion Brothers.

259. Wilcox, E. V. Big farming in Argentina. (In Country Gentleman, v. 92, no. 4, April 1927, p. 26-27, 161, 168)

AUSTRIA.

260. Ruhland, G. Aus der praxis eines neu gegründeten landwirthschaftlichen grossbetriebes im Pinzgau. (In Landwirtschaftliche Jahrbücher, bd. 22, 1893, p. 517-567) 18 L23 bd. 22.
A description of a large estate in the Pinzgau in Austria.
261. Austria. See also item no. 333 Rambaud, B. Les fermages collectifs.

BRAZIL.

262. Hunnicutt, B. H. Una gran hacienda moderna en el Brasil. (In La Hacienda, v. 23, no. 6, June, 1928, p. 210-212) 6 H11
A description of an estate of 10,000 acres in São Miguel, Brazil, owned by Colonel Gabriel Andrade.
263. Pontes, G. M. Typical Brazilian sugar estate. (In Sugar, v. 27, March-April 1925, p. 111-113, 171-172)
A description of the Usina Cucau, one of the large sugar estates located at Cucau, Pernambuco, Brazil.

CANADA.

264. Craig, John Roderick. Ranching with lords and commons; or, Twenty years on the range, being a record of actual facts and conditions relating to the cattle industry of the northwest territories of Canada; and comprising the extraordinary story of the formation and career of a great cattle company. Toronto, Printed for the author by W. Briggs [1903] 293 p. L. C.
A popular account of the formation in 1882 of a cattle company in London which owned and operated Oxley Ranch in Western Canada.
265. Grain Growers' Guide. Bonanza farming. (In Grain Growers' Guide, v. 19, no. 24, Sept. 15, 1926, p. 7) 7 G76
"The Scottish Co-operative Wholesale Society has sold its sixteen-section farm at Hughton, Sask. Thus another bonanza wheat farm has passed out of existence and further evidence is provided that factory methods of mass production cannot be applied to agriculture."
266. Hallett, F. W. Country's largest white Wyandotte farm. (In American Poultry Advocate, v. 25, no. 4, March 1917, p. 263-265) 47.8 Am34.
A brief description of the Regal Poultry Farm of John S. Martin, Port Dover, Ontario.

267. McCaig, James. Making big farms pay twenty per cent. (In Nor'west Farmer, v. 39, no. 18, Sept. 20, 1920, p. 1263, 1273)
Describes the grain farm of C. S. Noble of Nobleford, Alberta. Noble Foundation, Ltd., is organized on a standard company plan. Workers are generally stockholders.
268. Nor'west Farmer. Big farm that pays. The C. P. R. Strathmore farm. Maintains Canada's largest herd of Holsteins. Nine main farms with branches all over the West are directed by G. H. Hutton. (In Nor'-west Farmer, v. 46, no. 11, June 6, 1927, p. 7, 10)
269. Nor'-west Farmer. Operating a 10,000 acre mixed farm. (In Nor'-west Farmer, v. 42, no. 14, July 20, 1923, p. 738)
A description of J. R. Hamilton's management of the Lyman Farms at Arnaud, Manitoba. The land is divided into five farms with a foreman in charge of each.
270. Ontario. Agricultural and experimental union. For the best results, should the tendency in Ontario be to group farms into larger ones, to divide them into smaller ones, or to leave them at about their present size? (In Its Annual report, 32d, 1910, p. 75-78)
A. G. MacKenzie, S. A. Northcott, W. J. Lennox, and C. A. Zavitz took part in the discussion in answer to the question asked in the title. Their opinions varied.
271. Robinson, John H. Development of the world's greatest white Wyandotte farm. (In Reliable Poultry Journal, v. 27, no. 10, Dec. 1920, p. 905 and others) 47.8 R27
The farm described is John S. Martin's poultry farm at Port Dover, Ontario, from which he "sells upwards of five thousand White Wyandottes a year".
272. Williams, R. S. Using power on big farms. (In Nor'-west Farmer, v. 48, no. 17, Sept. 5, 1929, p. 5)
The Wilson Brothers of Harris near Saskatoon, Saskatchewan, own and farm nine sections. In the rush season, the tractor can be used twenty-four hours a day by using two men in shifts.

EGYPT.

273. Barois. Étude sur quelques exploitations agricoles Égyptiennes. (In Académie d'agriculture de France. Comptes Rendus, v. 4, no. 13, April 10, 1918, p. 417-427) 14 P215Bc
The author describes certain capitalistic agricultural enterprises in Egypt with the purpose of interesting investors in similar projects in the French colonies.
Abstracts of the article were published in International Institute of Agriculture, Review of the Science and Practice of Agriculture, v. 9, no. 8, 1918, p. 982-984; Canada. Dept. of Agriculture. Agricultural Gazette of Canada, v. 5, no. 1, Jan. 1919, p. 109 (7 C16C)

274. Rostovtzeff, Michael. A large estate in Egypt in the third century B. C. 1922. 209p. (Wisconsin University Studies in the social sciences and history no. 6) 30.9 R73

This study is based largely on papyri found near Philadelphia, Egypt, which consisted of the correspondence of Zenon in which he gives considerable information in regard to the management of his estates. The references under workmen in the Index show the form of contract and the kind of paid labor used.

FRANCE.

275. Alluard, G. Culture en grand de la tomate aux environs de Paris, (In Revue Horticole, v. 67, 1895, p. 45-47)

The cultivation of tomatoes on a large scale near Paris.

276. Blanchard, C. L'evolution dans la vie rurale - La culture scientifique. Macon, France, Perroux et fils, 1919. 54p. 33.17 B59

"The evolution and manner of land ownership and exploitation in France are briefly described in the first part of this pamphlet, and in the second, principles of scientific management. The author favors collectivism in agriculture and maintains that it may be fostered by agricultural education and organization." Experiment Station Record v. 41, p. 792.

277. Evrard, Fernand. Les grandes fermes entre Paris et la Beauce. (In Annales de Géographie, v. 32, no. 177, May 15, 1923, p. 210-226) 473 An75 v. 32.

"These pages are descriptive of the agriculture typical of the region southeast of Paris, setting forth the buildings and equipment, the important crops, methods of cultivation, and the market for the products of the large farms found there." Experiment Station Record, v. 49, p. 894.

278. Germain, Pierre. Une ferme dans la Brie (Plaine de Mormant). Beauvais, Impr. Prévot, 1924, 128 p. 33.17 G31

Thèse agricole - Institut agricole de Beauvais.

A detailed study of a farm of 285 hectares (704 acres) in the Department Seine-et-Marne in France.

279. Grandel, Jean. Une ferme de grande culture dans le Soissonnais. Rennes, Impr. L'Ouest-Eclair, 1925. 144p.

Thèse agricole - Institut agricole de Beauvais. Describes the system used on a large farm in France.

280. Javal, Adolphe. La confession d'un agriculteur. Paris, A. Fayard et cie, 1929. 249p. 30.4 J32.

In reviewing this book in Agricultural Economics Literature for November, 1929, Mrs. A. M. Hannay writes in part as follows: "... a plea for the industrialization of agriculture is being

made in popular language and accompanied by illustrations from the author's own experience. He believes that it is possible to arrange a definite schedule of work for each employee of not more than 10 hours a day, and to pay him on an hourly basis. Mechanical equipment will lessen physical fatigue, and the provision of living quarters and a garden will solve the question of maintenance for him and his family. By such means it should be possible to attract men who are more dependable than the majority of those who now seek work on the land, men who will be willing to forego the possibility of more remunerative summer work elsewhere in favor of a permanent job. It seems to him even possible that, in course of time, when modern methods of eliminating distance have been made more accessible, it may become possible to attract city dwellers to report daily for farm work just as today dwellers in the suburbs make daily trips to the city. In addition to a reorganized personnel there is need of system and order in the management of the farm. A minute lost in the field is never regained. The author feels that, although every Frenchman is a born mechanic and although many have a very intimate knowledge of farming technique, yet there is a dearth of that organizing ability in which the German excels. Reorganization of agricultural labor and of farm management methods, and the elimination of unnecessary waste either of time or of material will enable the farmer to decrease the cost of production and thus hold his own in the competition with industry."

281. Macaigne, A. Notre France d'après-guerre. Paris, Roger & Co., 1917. 304 p. 280 M11

In the chapter on agriculture, the author urges the group management of farms.

282. Remy, B. La Société fermière de Cîteaux. Dijon, Impr. Bernigaud et Privat, 1924. 117p. 33.17 R28

Thèse agricole - Institut agricole de Beauvais.

"The equipment, crops and livestock produced, and the farming methods followed on a large-scale capitalized farm enterprise of more than 1,000 hectares (2,471 acres) in the Canton of Beaume in the Département Cote-d'Or, France, are described in detail in these pages." - Experiment Station Record, v. 54, p. 181.

283. Rochettes, A. M. des. Adaptation du métayage aux organisations modernes des sociétés anonymes agricoles. (In Journal d'Agriculture Pratique, n.ser. v. 31, no. 19, Sept. 19, 1918, p. 373-374) 14 J82

"The author outlines the theory of a combination of labor and capital, including money and land, into agricultural societies operating on a share-leasing basis. He shows the advantages of such a combination in the possibility for diversified activities in addition to the actual farm operations; for the employment of disabled soldiers and the widows and orphans; the stability of labor; and the sharing by the laborer of the profits of his labor." - Experiment Station Record, v. 40, p. 490.

284. Saillard, Emile. The Marchais property (Aisne) (In the Planter and Sugar Manufacturer, v. 79, no. 6, Aug. 6, 1927, p. 101-102) 65.8 L93

A brief description of the property of the Prince of Monaco in France which is divided into two farms of 350 and 420 hectares under cultivation. The principal crop is sugar beets. Approximately 200 laborers are employed from the local population.

285. Scottish Journal of Agriculture. The co-operative societies for bringing land under cultivation: France. (In Scottish Journal of Agriculture, v. 2, no. 3, July, 1919, p. 422-423) 10 Sco82So

Resumé of enquiry made by M. Louis Tardy, for the Academy of Agriculture of France, into the results obtained by the cooperative cultivating societies.

286. Tardy, Louis. Les coopératives pour la mise en culture des terres. (In Académie d'agriculture de France. Comptes rendus, v. 15, no. 2, Jan. 15, 1919, p. 79-92) 14 P215Bc.

"This reports the author's inquiry into the work of cooperative cultivating societies in various districts of France in increasing agricultural production and bringing about certain social and economic reconstruction." - Experiment Station Record, v. 41, p. 593, Abstracted in International Institute of agriculture. International Review of Agricultural Economics, v. 10, no. 1/2, 1919, p. 30-35; Scottish Journal of Agriculture, v. 2, no. 3, July, 1919, p. 422-423 (10 Sco82So)

GERMANY.

287. Aereboe, Friedrich. Agrarpolitik; ein lehrbuch. Berlin, P. Parey, 1928. 619p.

"Literatur": p.590-610.

In reviewing this book in the Journal of Farm Economics for October, 1929, p. 673, Dr. Kurt Schneider writes in part as follows: "Extraordinary attention is given to the question of the most advantageous size of the farming unit. Family farming is contrasted with large-scale farming as to economic productivity, profitability, and social desirability. The difficulties encountered under the prevailing socio-economic structure of eastern German farming are set forth at length, the leading thought being that large-scale farming in its present forms is socially as well as economically least desirable from a national point of view."

288. Backhaus, A. Das versuchsgut Quednau, ein beispiel der angewandten modernen betriebslehre. Berlin, P. Parey, 1903. 270p. 105.3Q3

"In this volume an account is presented of the opportunities offered on large agricultural estates for testing and applying modern methods of culture. Historical notes are given on the estate of Quednau

[near Königsberg, East Prussia]. A detailed description is presented of the plan upon which the estate is laid out and of various experiments which have been organized and carried out, especially on the subjects of fertilizers, cultivation of cereals, grasses, and roots, feeding animals, electro-culture, and the control of weeds and fungus diseases." Experiment Station Record v. 15, p. 964.

289. Bertram, Martin. Die gemeindeländereien in der Eifel, dargestellt an den Kreisen Daun und Prüm. (In Landwirtschaftliche Jahrbücher, bd. 47, hft. 2, 1914, p. 153-237)

"This study of the use of land in common indicates that forest land can be used in common to advantage, and that a common pasture is feasible where there are a number of small farmers, but that the use of other land in common is not, as a rule, satisfactory, either from a social or an agricultural point of view. A brief bibliography is included." - Experiment Station Record, v. 33, p. 893.

290. Glienke, Gerhard. Landwirtschaftliche grossbetriebe und bäuerliche wirtschaften auf den verschiedenen bodenarten. (In Sozialistische Monatshefte, v. 68, no. 1, Feb. 1929, p. 13-135) L. C.

Not examined.

In his abstract of this article in Social Science Abstracts for September, 1929, entry no. 6246, p. 920, Dr. G. S. Wehrwein states that the census of agricultural conditions taken in Prussia in 1925 shows "that there is a significant correlation between soils and agricultural organization. Large-scale farms are generally found on the better soils; the middle and small peasant farms occupy the poorer soils..."

291. Hoch, J. Zur frage der konkurrenzfähigkeit von gross, mittel- und kleinbetrieb in der landwirtschaft. (In Landwirtschaftliche Jahrbücher, bd. 36, 1907, p. 1-97)

"A detailed critical discussion of this subject in which it is shown in general that small and medium-size operations are economically superior to farming on a large scale. This advantage, however, is due not so much to the district in which the farm lies nor to special methods of culture as to the greater productivity of a uniform soil and of the industry as a whole." - Experiment Station Record, v. 18, p. 1089.

292. Pagel, Paul. Gross und kleinbetrieb in der landwirtschaft. Berlin Deutsche Landbuchhandlung, g.m.b.h., 1922. 56p. 33.27 Fl4. Benutze literatur: p. 3.

"A review of the most important of the writings of the last decade dealing with the competitive value of farming on a large or a small scale. The conclusion is that no definite, comprehensive statement can be made, but that in general the large farm has the advantage in the production of marketable crops, the smaller one in that of animal products." A. M. Hannay, Library Supplement to B. A. E. News, no. 25, Sept. 29, 1925, p. 5.

293. Preussische zentralgenossenschaftskasse. Die lage der landwirtschaftlichen grossbetriebe in den östlichen landesteilen. Berlin, P.Parey [1928]. 130p. (Its Landwirtschaftlich-betriebswirtschaftliche abteilung no. 2, 2 aufl.) 284.9 P92 no.2.

A statement of the financial conditions on large estates in the provinces east of the Elbe since the stabilization of the currency.

294. Putlitz. Arbeitsverfassung eines landwirtschaftlichen grossbetriebes in der Prignitz. (In Landwirtschaftliche Jahrbücher, bd. 36, 1907, p. 863-908)

"This article presents the detailed operations of a large farm [in Brandenburg, Germany] for a number of years, with a discussion of the results of the inquiry as applied to the economic welfare of proprietors and all classes of farm help." - Experiment Station Record, v. 19, 1907-1908, p. 1190.

295. Richter, Fritz. Über den einfluss verschiedener wirtschaftlicher und natürlicher verhältnisse auf die zweckmässige betriebsgrösse und betriebsgrössenverteilung der landgüter. (In Germany. Reichsministerium für ernährung und landwirtschaft. Berichte über landwirtschaft, n.f. bd. 8, hft. 4, 1928, p. 498-539) 18 G31
Also issued as 54-page thesis of the Landwirtschaftliche Hochschule, Berlin, 1927. 281 R41.

In a review of this article in Agricultural Economics Literature for June 1929 (v. 3, no. 6, p. 198) Mrs. A. M. Hannay writes in part as follows: "After discussing a number of the advantages and disadvantages of large and small enterprises, the author decides that both kinds are necessary both for the individual and the general welfare. Their relative proportion also depends largely on economic conditions. Should one class of farms tend to out number the others to the economic disadvantage of the country, that can be corrected."

296. Schulze, Georg. Das eigeninteresse im landwirtschaftlichen grossbetrieb. (In Landwirthschaftliche Jahrbücher, bd. 46, hft. 1, 1914, p. 41-88) 18 L23 bd. 46.

"Literatur"; p. 87-88.

"The author discusses various means that can be employed to arouse an interest among the workers on large agricultural establishments similar to that of ownership. Among the means mentioned are premiums or supplementary wages, sharing in the profits, and the working up of rivalry by assigning a portion of the farm to an individual or a group of individuals. In the care of animals he found a natural pride that is easily stimulated by the use of any of the above means. A brief bibliography is included."- Experiment Station, Record, v. 31, p. 593.

297. Sieber, Günther. Die veränderungen in der produktivität und rentabilität der landwirtschaft während der letzten jahre, erläutert an Bauern- und Rittergütern Thüringens. Berlin, Emil Ebering, 1919. 149p.

(Volkswirtschaftliche studien... hft. 2) L. C.

"Literatur": p. 6.

"Two peasant farms, one small and one of medium size, and three large estates were made the subjects of detailed study through the years 1913 to 1917, inclusive. The war and government control of feeding stuffs are shown to have affected seriously the livestock industry on both types of holdings. The peasant farms are said to have suffered greater reductions in the size of herd and in milk and butter-fat production, largely owing to the fact that they were more dependent upon purchased feeding stuffs than were the larger farms." - Experiment Station Record, v. 47, p. 92.

298. Studensky, G. A. The machinery and power in the large farms of Germany. Samara, 1928. 36p. (Sredne-Volzhskii sel'skokhoziaistvennyi institut. Opytno-issledovatel'skaia stantsiia po organizatsii khoziaistva. [Trudy] issue 4) 106 Sa42 no. 4

Text entirely in Russian. Title-pages both English and Russian.

The author discusses the problem of power and the utilization of machinery on large German farms. The study is based in part on the 1925 census, but mainly on a personal detailed investigation of 31 large farms in Germany. All of the data collected in the course of this survey will be found in another work of the author-Organization and Management of Large Farms in Germany. 1929. Moscow, (U. S. S. R.) - L. Volin

299. Studensky, G. A. The organization and management of the large farms in Germany. Moscow, 1929. 448p.

Text entirely in Russian. Title-pages and contents in both English and Russian.

This study is based primarily on the examination of 31 well-organized large farms in Germany in the autumn of 1927. After outlining the general agricultural conditions and the development of large-scale farms the author describes various large-scale enterprises. He next discusses the fundamental principles of the organization of large farms, devoting a chapter to each of the following subjects: selection of the farm including a discussion of the terms of the lease; importance of construction and arrangement of buildings; importance of machinery for large farms; cropping systems; dairying; swine; sheep; labor conditions and the replacement of labor by machinery; farm accounting; debts of agricultural enterprises; and state farms in Germany. He concludes with a discussion of the importance of the size of the production units and the place of the large agricultural enterprise in the economic progress of the future.

The author, when he was working in the Library, Bureau of Agricultural Economics, summarized the conclusions reached in his book as follows: 1. Technical progress is the primary factor in the dynamics of agriculture and farm organization. 2. Technical progress consists in the increased application of fixed capital, especially of large machinery. 3. This increased application of fixed capital and large equipment necessitates an increase in the

producing units of the farm because fixed costs (depreciation, interest, etc.) must be distributed over a large number of production units. 4. All factors which retard the increase in the size of farms at the same time retard technical progress. 5. Large farms in Germany have technical advantages over the small farms in all phases of farming: in the yield per acre; in the use of commercial fertilizers; in the yield of milk per cow; in the preparation of the soil; in the utilization of machinery, etc. 6. The large farms in Germany are the leaders in technical progress. 7. In spite of the evident technical and economic advantages of large farms, small farms at present predominate throughout the world. The cause of this situation is a question requiring special investigation. But the analysis in this book leads to the conclusion that further human progress is quite impossible without increasing the size of the farm unit.

GREAT BRITAIN.

300. Besant, Annie. Industry under socialism (In Fabian essays in socialism, p. 186-210) L. C.

The author describes the organization of county farms under the direction of the County Council where the unemployed can find suitable work under the head farmer. She refers to the farms as "Great farms, improvements of the Bonanza farms in America".

301. Bulstrode, W. Cooperative farming. London, P. S. King & Son, 1908. 23 p. 280.2 B87

This pamphlet outlines a scheme for forming a corporation to acquire a large tract of land to be farmed under scientific management.

302. Green, F. E. A new agricultural policy. London, Leonard Parsons, 1921. 169p. 281 G82

"The large farm, communally owned and administered" is recommended for both the economic and the social benefit of the farmer.

303. Hall, A. D. Agriculture after the war. London, 1916, 137p. 32 H14A
Advocates "industrial farms" for Great Britain in order to increase agricultural production.

304. Leake, H. Martin. A future for British agriculture. (In Realist, v. 1, no. 2, May, 1929, p.108-119.) Also issued as a reprint. Pam. Coll.

The author believes that corporation farming would be a benefit to British agriculture, and he outlines a scheme of organization.

305. Levy, Hermann. Large and small holdings; a study of English agricultural economics. Translated by Ruth Kenyon... Cambridge, University Press, 1911. 249p.

The German edition of this book was published in 1904 in Berlin by J. Springer under the title Entstehung und Rückgang des Landwirtschaftlichen Grossbetriebs in England.

Chapter 9 is devoted to the Respective Economic Advantages of the Large and Small Holding.

306. Mansfield, W. S., and Boyes, D. Record of 12 years' development on a 1500 acre farm. (In Gt. Brit. Ministry of agriculture and fisheries. Journal, v. 29, no. 1, April 1922, p. 10-16) 10 G79J

The farm described is the Shippea Hill Estate of Messrs. Chivers and Sons "7 miles from Ely at the junction of the Cambridge, Norfolk and Suffolk borders" in England. The company purchased various tracts and "there are now nine farms on the estate, each with its own staff under a foreman, the whole being under the control of a resident manager..." The author states that "in its present condition the estate offers a remarkable demonstration of the results that can be achieved by enterprise and organization when these are backed by capital."

307. Orwin, Charles Stewart. Farming. (In Manchester Guardian, May 17, 1928, p. 9; June 20, 1928, p.-9; July 27, 1928, p. 9; August 20, 1928, p. 7)

Contents.-Position of the landlord. A waning influence. (May 17, 1928).- Position of the family farmer. Three spheres of activity. (June 20, 1928).- The capitalist farmer. (July 27, 1928).- The farm worker (Aug. 20, 1928).

308. Orwin, Charles Stewart. The place of agriculture in industry. (In Ruskin college. Some problems of urban and rural industry. Birmingham, 1917, p. 60-75) 283 R89

Advocates large scale production for the British farmer.

309. Orwin, Charles Stewart. The relative advantages of intensification or extensification of farming. [Edinburgh, Riverside press ltd., 1928] 6p.

A paper read at the Conference on Recent Changes in Systems of Husbandry in Great Britain, at Rothamsted Experimental Station, Nov. 27, 1928.

The author concludes this paper as follows:

"I have had to limit myself to the discussion of a few only of the points raised under the title of this paper. There can be no absolute decision on the subject suggested by it, and to sum up, three questions seem to be indicated, the answers to which I must leave you to supply:

"(1) Are we to attempt a gradual redistribution of the land so as to promote its occupation in smaller units, thus bringing our farmers and farm-workers down to a subsistence level, as represented by the family farmer, in order to put them on equal terms with their overseas competitors?

"(2) Are we, on the other hand, to meet this competition by taking a lesson from urban industry - a lesson which has been applied already, here and there, by agriculturists in regard to particular products - and to seek to maintain the standard of living by application of the large-scale factory system, with a low-production cost and a lower output per acre?

"(3) Or are we, as another alternative, to direct production in this island in such a way as to exploit the virtual monopoly in certain commodities which we enjoy by reason of transport costs, perishability and so forth, leaving all land which would be described as 'marginal' under such a system to go in or out of cultivation of one kind or another, as the state of the market or the courage of agricultural adventurers might determine?"

310. Paget, Richard. Partnership in agriculture between landlord and tenants. (British association for the advancement of science. Report, 1913, p. 778-782) 501 B77
The ideal relationship between landlord and tenant is that of a business partnership. A form of contract is given.
311. Smith, James Haldane. Collectivist economics. London, George Routledge & sons, ltd., 1925, 216p. 280 Sm53
A few pages in the chapter entitled: The Process of Collectivization are devoted to the difficulties and advantages of organizing agriculture on a collectivist basis.
312. Tenny, Lloyd Stanley. Farm and estate management. (In National Association of real estate boards. Annals of real estate practice 1927, v. 1, p. 632-645) Typewritten copy in Pam. Coll.
Mr. Tenny emphasizes the growing need for estate management in the United States and describes two organizations in England which are composed mostly of men interested in land management, namely The Surveyors' Institution and the Land Agents' Society.
313. Turnor, C. Partnership farming (In Scottish Journal of Agriculture, v. 10, no. 4, Oct. 1927, p. 377-382) 10 Sco82S0
The author points out the advantages of partnership farming and indicates the form he considers most desirable for Scotland.
314. Wallace, Henry A. With Wallaces' Farmer's editor in England. Tenants and landlords on English farms. (In Wallaces' Farmer, v. 34, no. 39, Sept. 27, 1929, p. 1293, 1314)
Mr. Wallace reviews Mr. J. P. Maxton's paper on tenancy in Great Britain read at the Dartington Hall conference in Devon. He quotes Mr. Maxton as favoring nationalization of land and as saying, "Capitalistic farming on a large scale by tenants is inevitable in a highly industrialized nation."
315. Weigall, A. G., and Wrey, Castell. A large State farm. London, John Murray, 1919, 82p. 275.1 W42
This book outlines a plan for a large estate to be owned and operated by the government as an experiment and a demonstration to interest large land owners and corporations in establishing similar business enterprises.
316. Wibberley, T. Farming on factory lines. London, C. Arthur Pearson, ltd., 1917. 264p. 32 W632.

"There is only one way by means of which the farm can successfully compete with the factory, and that is by running the land on factory lines, aiming, as in a factory, for an even distribution of labour throughout the year, and using wherever possible labour-saving and labour-economising machinery." - p.48. His methods are described in detail.

317. Wilkins, Mrs. Roland. (L. Jebb) Co-operation in the tenure of small holdings. (In Gt. Brit. Board of agriculture. Journal, v. 16, no. 5, Aug. 1909, p. 353-364) 10 G79J

Tells of the work of the Agricultural Organisation Society in Gt. Britain in assisting in the organization of cooperative small holdings under the Small Holdings Act of 1907. A brief description is given of the following societies: The Mere and District Small Holders, Limited, which owns 452 acres on which 28 small holders are installed principally in dairying, and is located about four miles from Gillingham on the borders of Wiltshire and Dorset; The Biggleswade Small Holdings Association in Bedfordshire whose members are engaged in market gardening; and the Mid-Northamptonshire Association which is a central association under which 27 local societies are formed.

HUNGARY.

318. Frank, Théodore. Une grande ferme en Hongrie. (In La Vie Agricole et Rurale, t. 33, no. 23, June 9, 1929, p. 359-361)

The author discusses the organization of a large estate in Hungary.

319. Károly, Rezső. Fruchterträge von grossbetrieben in ungarn in den jahren 1911-1920. (In Hungary, Königl. Ungar. Ackerbauminister. Kiserletügyi Közlemenyek... v. 27, no. 1/2, 1924, p. 33-75) 105.9 H89

Article entirely in Hungarian.

"An investigation is reported upon, in which questionnaires were returned representing 110 large farms in Hungary, 75 of them west of the river Don, 16 between the Don and Tisza, and 14 east of the Tisza. In general crop yields on these estates surpass the average by about 50 per cent..." - Experiment Station Record, v. 53, p. 796.

320. Hungary. See also item no. 333 Rambaud, B. Les fermages collectifs.

ITALY.

321. Casabianca, Antonio. La mezzzeria in Toscana in alcuni documenti medioevali. (In Florence. R. Accademia economico-agraria dei georgofili di Firenze. Atti, 5. ser., v.20 no. 2/4, Apr./Oct. 1923 p.19-28) 507 F51

"These notes describe some of the earliest farming partnership contracts and references to the system found in the Medieval literature of Italy, certain of them dating back to the sixth century. The earliest actual authentic document of such a contract is said to bear the date of August 17, 1224." - Experiment Station Record, v. 52, p. 690.

322. Costanzo, Giulio. The principal types of agricultural cooperative society in Italy. (In International Institute of Agriculture. International Review of Agricultural Economics, n. ser., v. 1, no. 1, Jan./Mar. 1923, p. 50-80)

A list of sources is given at the beginning of this article.

Pages 74 to 80 are devoted to a description of the cooperative landholding societies in Italy.

323. Dumont, P. Le collectivisme agraire et les fermages collectifs en Italie. (In Vie Agricole et Rurale, v. 8, no. 41, Oct. 12, 1918, p. 261-264.)

"This article is an account of two principal types of collective holdings in Italy, those under a central management and those divided into small individual holdings, as well as of the details of organization of agricultural cooperative societies..." - Experiment Station Record, v. 40, p. 389.

324. Gide, Charles. La cooperation dans les pays latins; Amérique Latine, Italie, Espagne, Roumanie. Paris, Association pour l'enseignement de la coopération [1928] 28p. 280.2 G36Co

This book includes descriptions of the cooperative cultivation of the land in Italy and Roumania.

325. Gori, Agostino. Il presente momento della mezzeria Toscana. (In Florence, R. Accademia economico-agraria dei georgofili di Firenze. Atti, 5. ser., v. 3, no. 4, p. 339-354) 507 F51

"The author describes various socialistic and communistic plans that have been proposed and practiced from time to time as a solution of the labor problem, presents a view of partnership farming in Tuscany, and shows how this method has resulted in improving the condition of farm laborers. The intellectual, moral, and physical well-being of farmers under this system is said to be greatly superior to that of industrial workers. Farming on shares is believed to offer a solution of the conflict between capital and labor in the rural district of Tuscany." - Experiment Station Record, v. 18, p. 993.

326. Hitier, Joseph. Die affittanze collective, eine neue form der landwirtschaftlichen produktivgenossenschaft in Italien. (In Deutsche landwirtschafts-gesellschaft. Mitteilungen v. 22, no. 16, 1907, p. 160-164; also issued in Revue d'Economie Politique, v. 21, no. 3, March, 1907, p. 207-221; and in shorter form in Journal d'Agriculture Pratique, n. ser., v. 13, no. 20, May, 1907, p. 616-618)

"This article describes the cooperative associations of agricultural laborers in Italy and Sicily, and gives an account of the causes and results of the movement to April 30, 1906.

"The associations which are known as 'affittanze collettive,' or cooperative farms, arose as a remedy for the want of steady employment among farm laborers. An association composed of day laborers rents land and operates it either as a single farm under a manager or as individual allotments. Of 108 associations 25 belong to the former class and 83 to the latter, which is regarded as the more promising form of association. Statistics are presented of the membership in the most flourishing societies, together with the number of hectares cultivated and the value of products raised. As regards the furnishing of employment and the returns from the labor expended, the results thus far prove that the associations are highly successful, but where associations have a larger membership than number of lots, a system of permitting members to cultivate a lot for a short period of time is practiced, and this the author regards as a grave economic defect. As a means of overcoming this difficulty it is suggested that such associations rent more land or cut down the size of the lots in order to grant an allotment to each member. A bibliography is included." - Experiment Station Record, v. 19, 1907-1908, p. 587-588.

Only the German edition contains the bibliography.

327. Hobson, Asher. The collective leasing and farming of land in Italy. (In Journal of Land and Public Utility Economics, v. 2, no. 1, Jan. 1926, p. 67-72) 282.8 J82

The three types of collective leasing in operation in Italy are described. A foot-note states "In the preparation of this article the author has drawn freely from Dr. Dario Guzzini's publication entitled *Le Imprese Agricole Cooperative*, Professor Serpieri's *Studi sui Contratti Agrari*, and an unsigned article appearing in the October, 1921, issue of the *International Review of Agricultural Economics*, entitled 'Cooperative Landholding Societies in Italy.'" In concluding the author writes, "This brief history contains helpful suggestions to the United States by pointing out circumstances to be avoided. American agriculture is fortunate in not having a class struggle among those engaged in farming... A prudent national agricultural policy must prevent the formation of a permanent class of landless agricultural workers."

328. International Institute of Agriculture. Collective farms... (In International institute of agriculture. International review of agricultural economics, v. 9, no. 5 and 8, May and Aug., 1918, p. 366-382, 617-630.)

A list of sources is given at the beginning of the article in the May issue.

The general character of the collective farm in Italy is described.

329. International institute of agriculture. Collective leases in the Provinces of Parma, Bologna, and Ferrara, and in Lombardy. (In International institute of agriculture. Review of agricultural economics, v. 10, no. 8/10, Aug./Oct., 1919, p. 447-463)

A brief list of sources is given at the beginning of the article. This is a continuation of the article entitled Collective Farms in the International Review of Agricultural Economics, v. 9, no. 5 and 8, May and Aug. 1918.

330. International Labour Review. Community cultivation of the soil in Italy. (In International Labour Review, v. 10, no. 5, Nov. 1924, p. 825-836) 283.8 In8

"There are three forms of combined cultivation of the soil in Italy. The first is a system of combined leases, when a number of persons join together to act as a co-operative society and obtain fair terms from the landlord, each, however, holding and cultivating a separate farm; the second, when each member of a co-operative society holds a parcel of land which he cultivates, largely for his family food supply, without being in a position to run an independent farm; and the third form, when all members of such a society cultivate one jointly owned farm and share its risks."

331. International labour office. Co-operative congress in Italy. (In its Industrial and Labour Information, v. 29, no. 2, Jan. 14, 1929, p. 57)

"A Congress of the Italian National Federation of Agricultural Co-operative Societies was held at Rome in November, 1923.

"The Congress unanimously adopted a resolution on the subject of co-operative farming societies which directly undertake the cultivation of the soil by means of the combined labour of their members. The resolution, which is the outcome of an inquiry into the conditions of this type of farming undertaken some time ago by the National Co-operative Union, draws attention to the fact that agricultural co-operative societies are built up in the same way as industrial undertakings, and have the same general characteristics. They are based on technical principles of organisation and division of labour, which make them highly important agents in the productive process. Further, they tend to make the wage-paid worker a cultivator, inasmuch as they free him for all time of the risk of unemployment. Such agricultural co-operative societies are the means of gradually establishing new enterprises of intensive cultivation, and are particularly adapted for the opening up of unimproved lands. They are also valuable for the encouragement they give to the poorer sections of the population, who can build up their new sources of wealth only little by little. They may therefore be considered powerful instruments of social and national welfare. On these grounds such societies should be given an important place among the agricultural activities of Italy."

332. Lloyd, E. A. Co-operative agriculture, (In The Co-operative movement in Italy. London, Fabian Society, 1925, p. 72-93)

280.2 L772

The chapter on Cooperative Agriculture contains descriptions of the different forms of collective leases in Italy.

The author states "that most of the information contained in this section of our study was obtained directly from an unpublished study of Signor Aillaud, one of the Italian representatives at the International Labour Office, Geneva."

333. Rambaud, B. Les fermages collectifs. (In Grignon. École nationale d'agriculture de Grignon. Annales, v.3, 1912, p. 107-135) 105.3 G672A, 1912.

"This article presents a comprehensive study of the systems of renting followed in Italy, Roumania, Austria-Hungary, and Servia, showing reasons for the movement in various sections to eliminate the system of renting land through monopolistic combinations and substitute therefor collective or cooperative renting. Data are given showing in detail the work and progress of the collective system and to what extent it has been successful in supplying work for the unemployed." - Experiment Station Record, v. 29, p. 295.

334. Smith, Gordon Lionel. Cooperative farming in Italy. (In Better Business, v. 5, no. 2, Feb. 1920, p. 81-101)

A discussion of the movement towards cooperative farming in Italy.

POLAND:

335. Polish Economist. Profit-earning capacity of large and small holdings. (In Polish Economist, v. 4, no. 5, May, 1929, p. 158-163)

"Investigations carried out in the Poznan area prove conclusively that small farms have better prospects for development than large estates."

RUMANIA.

336. Census and Statistics Monthly. Agricultural cooperation in Rumania. (In Census and Statistics Monthly (Canada), v.3, no. 28, Oct. 1910, p. 228-229) 253 C332M

Gives a brief statement of associations of peasants in Rumania for the cultivation of farms in common. The article is based on an article entitled: Les Banques et les Coopératives des Paysans en 1908, which is entered below under Rumania. Ministerul agriculturii si domeniilor. Direcțiunea statisticii generale.

337. Rumania. Ministerul agriculturii si domeniilor. Direcțiunea statisticii generale.

Les banques et les coopératives des paysans en 1908. (In its Buletinul statistic al Romaniei. ser. III, no. 11/12, anul, 1910, p. 420-425) 267.8 In 222B

A brief statement in regard to the associations of Rumanian peasants for the cultivation of farms in common. For an English summary see above Census and Statistics Monthly. Agricultural cooperation in Rumania.

338. Rumania See also item no. 333. Rambaud, B. Les fermages collectifs; and item no. 324 Gide, Charles, La coopération dans les pays latins.

SERVIA.

339. Servia. See item no. 333 Rambaud, B. Les fermages collectifs.

SPAIN.

340. Barthe y Barthe, Andrés. Notes sur la grande et la petite propriété en Espagne. (In Institut international de statistique. Bulletin, v. 18, no. 2, 1910, p. 507-512)

Notes on large and small property holdings in Spain.

341. Spain. Dirección general de agricultura, minas y montes. La Aparcería en España. (In its Boletín de agricultura técnica y economica, v. 15, no. 173, May 31, 1923, p. 485-500) 15 B63

A discussion of the partnerships and share leases prevalent in the various agricultural provinces of Spain.

342. Steding, Fritz. Der einfluss der betriebsgrösse auf die betriebs-organization unter besonderer berücksichtigung des arbeitsbedarfs. (In Landwirtschaftliche Jahrbücher, bd. 63, hft. 6, 1926, p. 855-876) 18 L23 bd. 63.

A study of the influence of the size of farm on the organization of the farm with special consideration given to labor requirements.

UNION OF SOCIALIST SOVIET REPUBLICS.

343. Auhagen, O.. Die neueste russische agrargesetzgebung. Bauernwirtschaft oder agrarsozialismus? (In Berichte über Landwirtschaft, n.f., bd. 10, hft. 2, 1929, p. 193-256)

This is a discussion of the Russian agricultural law passed in December, 1928, which encourages the spread of cooperation and collective farming. This article is to be reviewed by Mrs. A. M. Hannay in Agricultural Economics Literature for January, 1930.

- 343a. Chaianov, A. Segodniashnii i zavtrashnii den krupnogo zemledeliia. (In Ekonomicheskoe Obozrenie, no. 9, Sept. 1929, p. 39-51) 280.8 Ek74

In this article entitled Today and Tomorrow of Large Scale Farming, Professor Chaianov points out that the technical revolution

in world agriculture, produced by the tractor, the combine and the truck (automobile) gives an overwhelming advantage to the large mechanized farm over other types of agricultural organization in grain farming and also promises successful development of large-scale farming in other, more intensive branches of agriculture. The present position of large-scale farming, however, in different countries of the world which the author briefly reviews, is, in his opinion, not as strong as it may appear at first sight. The whole historic agrarian and economic background of agriculture in many countries will offer stubborn resistance to the introduction of large-scale methods of farming, the inevitable development of which in the capitalist countries will be accompanied by considerable political and social difficulties. In Russia, on the other hand, the collectivization of peasant farming will make possible a technical revolution in agriculture without any social catastrophe, according to Professor Chaianov, whose views on the future of large-scale farming are especially interesting since until recently he was one of the leading representatives of the peasant family farming school of Russian agricultural economics. - L. Volin.

344. Chamberlain, William Henry. The Russian peasant sphinx. (In Foreign Affairs, v. 7, no.3, Apr. 1929, p.477-487)

The author discusses the changes which have taken place in the psychology of the Russian peasant since the beginning of the World War and the changes attempted by the Soviet Government in "the most thorough-going agrarian upheaval in history."

A brief description is given of the state farm made of large tracts of land operated on the same principle as the state factory, and the collective farm which is an association of peasants who have pooled their land and work it in common.

345. Chelincev, A. Pomeshchich e khoziaistvo v Rossii pered revoliutsiei. (In Prague. Institute izucheniia Rossii. Zapiski, 1925, no.1, p.5-42; no. 2, p.49-81) 267 P88.

These articles are on the estate agriculture in Russia before the Revolution.

346. Economic Review of the Soviet Union. Many large collective farms being organized. In Economic Review of the Soviet Union, v. 4, no.20, Oct. 15, 1929, p. 369)

A brief statement as to the extent of collective farming in the Soviet Union.

347. Economic Review of the Soviet Union. Organization of large state grain farms. (In Economic review of the Soviet Union, v. 3, no. 18, Sept. 15, 1928, p.312. Published by the Amtorg Trading Corporation, 165 Broadway, New York, N. Y.)

The Central Executive Committee and the Council of People's Commissars of the Soviet Union have decided to establish large state grain farms. "It is proposed to organize a series of farms which

by 1933 will be able to supply 1,650,000 tons of grain for export. These farms will be equipped with modern machinery and implements. In addition to grain growing it is planned to organize on these farms in the future large-scale manufacturing of agricultural products such as flour, butter, etc."

348. Galevius, F. Zur organisation der Sowjetwirtschaften in der U. d. S.S.R. (In Agrar-Probleme bd. 1, hft. 3, 1928, p. 552-574.)
As a result of the nationalization of the land in Russia by the decree of October 26, 1917, part of the privately owned land was granted to the state while the rest was handed over to the farming population either for individual or for collective farming. A study of the development of the state farming enterprises with their gradual overcoming of initial difficulties and handicaps has convinced the author of their essential value and of their far-reaching influence for the improvement of the peasant enterprises that come into contact with them.
349. Gordicov, G. S. The fundamental problems of agricultural economics. Moscow, Cooperative publishing co., [1929] v.1 281 G652.
Text entirely in Russian. Title-pages in both English and Russian.
Among the chapter headings are the following: Scope and method of agricultural economics; Capitalistic and pre-capitalistic agriculture; Socialism and agriculture; Land rent; Nationalization of land; Diminishing returns in agriculture; Theory of intensive and extensive agriculture; Theory of small and large scale farming; Agriculture and technical development.
350. Jenny, E. Der teilbau nebst der monographie eines teilbaugrossbetriebs in Russland aus der zeit von 1891-1910. München und Leipzig, Duncker & Humblot, 1913. 346p. (Staats- und sozialwissenschaftliche forschungen... hft. 171) 282 J45
"Literatur": p. XII-XVIII.
Part two gives a detailed description of a large estate in Russia operated on a share basis.
351. Karpusi, D. Die kollektive ackerbaumwirtschaft in der U. d. S.S.R. (In Agrar-Probleme, bd. 1, hft 3, 1928, p. 459-496.)
A study of four districts in Russia including various types of farming, both intensive and extensive, forms the basis of this article. The growth of collective farming from 1920 to 1926 is outlined and its relative importance with regard to the agriculture of the country as a whole is briefly discussed. Different types of collective farming organizations are discussed as well as the economic and social position of their members.
352. Klein, Jerzy. Untersuchungen über betriebs verhältnisse, organisation und rentabilität eines grossbetriebes im schwarzerdegebiete Wolhyniens. (In Breslau Universität. Landwirtschaftliches institut. Mitteilungen. bd. 7, hft 1, 1914, p.49-200) 105.8 B75
In this investigation of a large farm in Russia "the author discusses the following factors that enter into the management of a

farm in the black earth region of Russia: The soil, climate, influence of climate upon yields, proportion of land under different types of cultivation, monthly distribution, kinds, and management of labor, capital invested in land, buildings, animals, and fertilizers, and cost and revenue from various farm crops. Most of the records shown cover a period of more than 15 years." - Experiment Station Record, v.31, p. 94.

353. Kuvshinov, I. S. Bibliograficheskii spravochnik. Moscow, Gosudarstvennoe Izdatelstvo, 1928 (Moscow. Nauchnoissledovatel'skii institut s.-khoz. ekonomii. Trudy no. 41) 281.9 M85
This is a bibliography of the literature on the technique and organization of the large pre-war Russian farms and Soviet state farms.
354. Montana Farmer. Russia studies Montana methods. (In Montana Farmer, v. 16, no. 10, Jan. 15, 1929, p.6)
An editorial on plans of the Soviet government "to powerize Russian wheat lands and go into large scale wheat production, using American methods." As a part of the plan the following representatives of the Soviet Grain Trust visited Montana to observe our methods; Leo N. Aginsky, G. I. Parfenenkoff, and V. I. Ilytchev.
355. Rafalskii, Serge. Selsko-khozaistvennye kollektivy Sovetskoi Rossii. (In Prague. Institut izucheniia Rossii. Zapiski, 1925, no.2, p. 307-332) 267 P88
An article on the collective farms of Soviet Russia.
356. Russian Review. Jewish agricultural settlements in the Soviet Union. (In Russian Review, v. 3, no.19, Oct. 1, 1925, p. 399-400) 280.8 R922
A brief description of some collective farming projects in Palestine.
357. Scheffer, Paul. A leap in the dark. The peasant and the commune.-Pioneering and class conflict. What Russian peasants say now.-Tolstoi and Dostojevski. The pierced dam. Translation from Berliner Tageblatt, Sept. 20, 1929. 11p. Typewritten.
Transmitted with Consular letter dated Berlin, Sept. 24, 1929, no. 4916. (Foreign Files. Farm Management. Russia - Consular report 324320)
A description of some of the collective farming communities in Soviet Russia.
358. Scheffer, Paul. The new "Mir"; translation from Berliner Tageblatt, Sept. 11, 1929. 10 p. Typewritten.
Transmitted with Consular letter dated Berlin, Sept. 18, 1929, no. 4099. (Foreign Files. Farm Management. Russia. Consular report 324321)
An article describing the organization of collective farming in Soviet Russia.

359. Scheffer, Paul. State grain factory number one. Translation of an article from the Berliner Tageblatt of September 26, 1928. 10p. Typewritten.

Transmitted with Consular letter dated Berlin, Sept. 28, 1928, no. 3963. (Foreign Files. Breadstuffs. Russia - Consular report 297913-30230)

The letter of transmittal states that "in this article, Herr Scheffer describes the initial attempt of the Soviets to undertake the 'manufacture' of grain on a large scale by cultivating 100,000 hectares of land near Selina in the Northern Caucasus." He points out difficulties of soil and climate which must be overcome in this vast attempt of the Soviet government to become independent of the peasants.

360. Soviet Union Review. Giant farms. (In Soviet Union Review, v.7, no. 5, May, 1929, p. 74-75)

A brief statement about the State farms in Soviet Russia. There are already in operation forty-four giant farms and a Committee to Aid the Growth of Large Grain Farms has been established in Moscow.

361. Soviet Union Review. State farms in the U.S.S.R. (In Soviet Union Review, v.7, no.1, Jan. 1929, p. 9-10)

A brief statement of the plans of the Soviet government in creating the large state farms.

362. Who is Who in the Grain Trade. Campbell in Russia. (In Who is Who in the Grain Trade, v. 18, no.7, Feb. 5, 1929, p. 18-19)

This editorial on Mr. Campbell's trip to Russia questions the success of the enterprise, not on account of lack of faith in Mr. Campbell, but owing to lack of confidence in Bolshevick socialism.

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AGRICULTURAL ECONOMICS BIBLIOGRAPHIES

- No. 1. Agricultural economics; a selected list of references. January 1925. Revised September, 1927; February, 1929.
- No. 2. Flour milling and bread making; selected list of references. February, 1925. Revised June, 1927.
- No. 3. A beginning of a bibliography of the literature of rural life. March, 1925.
- No. 4. Price spreads; a selected list of references relating to analyses of the portion of the consumer's price accruing to various agencies. March, 1925.
- No. 5. Long-time agricultural programs in the United States. - national, regional, and state. June, 1925.
- No. 6. Aids to writers and editors; a selected list of books on the preparation of manuscripts and the mechanics of writing, for use in the Bureau of Agricultural Economics. June, 1925.
- No. 7. Livestock financing; a selected list of references relating to the financing of the livestock industry in the United States. September, 1925.
- No. 8. The peach industry in the United States; a selected list of references on the economic aspects of the industry including some references relating to Canada. October, 1925.
- No. 9. Selected list of references on grain sorghums, grass sorghums, and broom corn. December, 1925.
- No. 10. Research in rural economics and rural sociology in the southern states since 1920; a list of the published, unpublished, and current studies. January, 1926.
- No. 11. Economic periodicals of foreign countries published in the English language; a selected list. February, 1926.
- No. 12. Government control of export and import in foreign countries. February, 1926.
- No. 13. Cooperative marketing of tobacco; a selected list of references. February, 1926.
- No. 14. Factors affecting prices; a selected bibliography, including some references on the theory and practice of price analysis. March, 1926.

- No. 15. Alabama; an index to the state official sources of agricultural statistics. March, 1926.
- No. 16. Periodicals relating to dairying received in the U. S. Department of Agriculture. June, 1926.
- No. 17. Farm youth; a selected list of references to literature issued since January, 1920. October, 1926.
- No. 18. Price fixing by governments 424 B.C. - 1926 A.D.; a selected bibliography, including some references on the principles of price fixing, and on price fixing by private organizations. October, 1926.
- No. 19. The apple industry in the United States; a selected list of references on the economic aspects of the industry together with some references on varieties. June, 1927.
- No. 20. Bounties on agricultural products; a selected bibliography. July, 1927.
- No. 21. Oklahoma; an index to the state official sources of agricultural statistics...including a list of the unofficial sources of Oklahoma agricultural statistics. August, 1927.
- No. 22. A list of international organizations interested in agriculture. November, 1927.
- No. 23. Control of production of agricultural products by governments; a selected bibliography. December, 1927.
- No. 24. The poultry industry; a selected list of references on the economic aspects of the industry, 1920-1927. February, 1928.
- No. 25. Taxation and the farmer; a selected and annotated bibliography. June, 1928.
- No. 26. Labor requirements of farm products in the United States. April, 1929.
- No. 27. Agricultural relief; a selected and annotated bibliography. June, 1929.
- No. 28. The strawberry industry in the United States; a selected list of references on the economic aspects of the industry. September, 1929.
- No. 29. Valuation of real estate, with special reference to farm real estate. November, 1929.
- No. 30. Large scale and corporation farming; a selected list of references. November, 1929.

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